

Beyond the Boom

Contemporary German Science Fiction



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p.machinery Michael Haitel

Editor: Michael K. Iwoleit
Proofreading: Jim Henderson, Zach Smith, Amy West, Michael K. Iwoleit
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Editorial

MICHAEL K. IWOLEIT

Contemporary German science fiction lingers in the long shadow of a boom time of science fiction publishing in Germany from the late 1970ies to the early 1990ies that in retrospect looks like a golden age. In the early 1980ies when I made my first forays into science fiction writing there were at one point no less than six paperback and two hardcover science fiction book series competing on the German market, chapbook serials such as Perry Rhodan not even included. Heyne Verlag in Munich was the largest science fiction publisher in the world, surpassing even US giant Tor with its monthly output of new titles. Its editor Wolfgang Jeschke, himself an internationally known writer, reported that in its best times the first printing of 20.000 copies of an average new release would be sold out within a few months. It was impossible for even the most enthusiastic science fiction fan to read all science fiction that was published, and for professionals on the distribution lists for review copies it became a problem to get rid of a wagon load of new books they received each month. Science fiction was on the brink of gaining mainstream recognition in these years. On each campus book stand there were at least a few Heyne books by outstanding science fiction writers such as John Brunner or Ursula K. Le Guin presented.

Embedded in this general boom time were a few years of promising opportunities for German science fiction writers to publish books in the hope of reaching a wider audience. Like the local science fiction production of many countries, however, German science fiction never managed to hold a candle to the popularity and commercial success of Anglo-American

writers. Wolfgang Jeschke made it a point to publish a wide selection of significant novels and collections by international writers, but even these failed to attract much attention. His comprehensive, initially twice annually edited anthologies provided German writers with a chance to publish short stories, novellas and even poems, but the general critical consensus was that too much German science fiction was published in this period and only a few writers demonstrated the quality and stamina to embark on a significant writing career.

There has been much discussion and speculation about the reasons for the decline of science fiction publishing in Germany. The changing tastes of the audience due to the influence of blockbuster cinema and TV series have surely been a factor. Another one was the growing popularity of massive science fiction and fantasy cycles and serials that invited readers, as Wolfgang Jeschke put it, „to mentally keep their house shoes on“ (in the 1990ies it had come so far that I used to joke: „I can't remember the last time when a trilogy with less than five volumes was published.“) At the end of the day these developments made science fiction less interesting for a general book reading audience. One by one large publishers discontinued their science fiction series. Heyne science fiction today is only a shadow of what it once was. As the last three of Wolfgang Jeschke's international anthologies were published in 2002 a major publishing opportunity for German science fiction story writers disappeared. With a few exceptions German science fiction went underground. An era of small and self publishing began.

Thanks to my collaboration with Ronald M. Hahn and scene -returnee Helmuth W. Mommers I had a chance to contribute a little to what has happened since then (Christoph Grimm's article in this issue provides a snapshot of the current situation). For decades the German scene had failed to establish a lasting science fiction story magazine for domestic writers (Alien Contact in Berlin was the periodical that came closest to reaching this goal) and when we met in mid-2002 at a science fiction convention in Cologne to establish a new magazine that became Nova we didn't expect to last long either. No one

would have been more surprised than ourselves had we known at this time that Nova would be approaching its 40th issue and its 25th year of publication today. As the last of the three co-founders I retreated from Nova in 2023 and left the magazine in the trustworthy hands of new fiction editor Marianne Labisch and publisher Michael Haitel to focus my editorial work on the revival of InterNova and on the book series Cutting Edge that is intended to present a selection of the best of German speculative fiction to a wider audience outside of the science fiction fandom.

The chance to edit a theme issue about German science fiction as comprehensive as this one came when I contacted translator Mike Mitchell. Austrian* editor and critic Franz Rottensteiner, who compiled the historical anthology *The Black Mirror and Other Stories* for Wesleyan University Press in 2008, was lucky to recruit for this book with renowned German to English translator Mike Mitchell a true master of his craft. Mike was so kind to give me his permission to republish several of his translations in this InterNova issue. Complemented with some translations that I did myself and others that its authors had at hand I finally arrived at a selection focusing on the self-publishing era that began with the first Nova issue and the revival of René Moreau's magazine *Exodus* shortly afterwards. It would not be complete, however, without a look into the past. German science fiction of the boom area, whose long shadow I have mentioned in the beginning, is represented with two classics from the 1980ies that I have to thank Ronald M. Hahn for contributing. Franz Rottensteiner looks back even further and provides little known facts about the reception of early German science fiction in the USA.

Michael K. Iwoleit
March 2026

**In case you wonder whether it's not a little reckless to regard Austrian-born Helmuth W. Mommers and Franz Rottensteiner as representatives of German science fiction: There has never been a clear distinction between the German and the Austrian scene, and it is hardly even noticed anymore that some of the best-known „German“ science fiction writers, such as Herbert W. Franke (another of Vienna's gifts to our favorite genre), are actually Austrians.*

Wildlife

THOMAS GRÜTER



Thomas Grüter is medical doctor and is an affiliate at the Chair of General Psychology and Methodology at the University of Bamberg.

He has published a number of popular science articles for Spektrum.de, Spiegel online, NZZ and other newspapers and magazines. For several years he has also published science fiction short stories. The short story "Meine künstlichen Kinder" ("My Artificial Children") was nominated for the German Science Fiction Award 2022. He lives in Münster in the northwest of Germany.

The hide was crammed full and the four of them could hardly move a limb. At least they could talk, as long as the croakers were still out of sight. The scientific name of that species was more elaborate, of course, but because of the rough sounds they produced, the members of the wildlife safari had nicknamed them croakers.

„Why do we waste our time in this shit hole to observe a species, that is not even native to this desolate spot?" Viifalura grumbled. „The ridiculous price of this luxury tour' should have bought us a tiny bit of comfort, if you ask me. Why don't we watch the croakers from the shuttle? Or in their cities?"

„Asshole!" thought second class scholar Flosiidij. Videos of the croakers moving about clumsily while uttering rough sounds had made the planet famous. But it was nature reserve and all research expeditions needed a ton of different permits. Flosiidij suspected that Viifalura had only joined to show off to his society circle. In any case, the guy had no scientific ambitions. He had failed the entrance exam of the academy spectacularly rendering him ineligible for a retry. On the other hand, the tour operator had received a generous contribution to the expedition expenditure from Viifalura's family head.

Heeriidoo, the respected senior first class scholar, felt obliged to put him in his place: "The terrestrial pseudo-intelligent life form of this planet, which you call croakers, tends to attack anything they consider unfamiliar or threatening. Therefore, getting close to their population centers is strictly forbidden, confining us to observing small groups in remote locations."

Heeriidoo used the classical harmonic language for his rebuke, an intricate polyphonic melody of hums and whistles. Flosiidij doubted that Viifalura understood much of the meaning, let alone of the subtext.

Heeriidoo continued:

„According to my theory, an intelligence capable of interstellar space travel will only occur in aquatic beings, with cephalopods like us enjoying an extraordinary advantages because we lack hard tissues limiting the evolutionary growth of the central nervous system. In terrestrial animals the case is even clearer: the overabundance of bones and muscles will necessarily prevent their nervous systems from reaching a size sufficient for real intelligence. They will only develop a kind of pseudo-intelligence, similar to state-building insects. When they show up in small groups, as they do here, their behavioral repertoire will most probably be reduced to a minimum. It is this very theory we want to prove in this expedition, and this is the only activity covered by the council's permission.“

„It's my theory, and I obtained all those permits,“ Flosiidij thought angrily. „And then this ringed tentacle spreader forced his f...ing way in.“

He carefully shielded the thought from the ganglions controlling his chromatophores, because otherwise his anger would have shown as a blue-stained discoloration. In his current position, this was not really advisable. As it turned out, Heeriidoo wasn't quite done with Viifalura:

„Even from participants owing their place to their family's patronage I do expect an honorable behavior, even if the narrow gene pool of their ancestry may have a negative impact on their cognitive performance.“

„Ouch, that hit home!“ thought Flosiidij. There was an awkward silence after Heeriidoo's tirade and Vooraial, their guide, hastened to give his formal welcome speech:

„Excellencies! On behalf of Galactic Wildlife Travel, the leading provider of wildlife viewing tours, I feel honored to welcome you to the highlight of our tour to this planet. First of all, I would like to remind you that the hide is surrounded by a high-energy protection field that maintains the necessary

aquatic environment in the hide even though we are several standard tentacle measures above sea level. I would strongly recommend you not to touch the field with two tentacle tips at the same time. This would close a high-voltage circuit causing considerable pain and and maybe muscle paralysis.

As required by federal regulations, an emergency circuit will kill the field before any serious damage can be afflicted, but believe me: you don't want to go through this experience. Therefore, excellencies, please do be careful. Galactic Wildlife Travel shall not be liable for injuries and damages due to careless or negligent behavior."

„Pointing with two tentacles is bad manners anyway", muttered Viifalura.

Voorai said: „Here they come. Unfortunately, the field membrane tends to amplify our voices and they might hear us. Therefore I would ask you to stay absolutely silent."

Bob Mansfield, with full title 'The Honorable Robert Charles Mansfield', never really felt attracted to exploring the biology of penguins, whales or fur seals. Still, on this arctic summer day he hurriedly stumbled along the rocky footpath so as not to fall behind the other wildlife photographers.

After Mansfield had quit his job in the Foreign Office two years ago, he had decided that wildlife photography tours to remote spots were an appropriate occupation for an affluent gentleman. His wife's adamant refusal to accompany him bolstered his determination. So far, he had adhered to the stoic ideal of apathia, the ability to endure life without any tempestuous emotions while doing his societal duty. Wildlife photography was the first occupation in his life producing results that were as aesthetically pleasing as they were permanent, two qualities he had never experienced in his professional career. And much to his surprise, he had noticed that he was capable of a feeling of passion. Within two year, he had turned into a happy person, a change that he had never dared hope from life.

He had even come to terms with the fact that he shared his hobby with nouveau riche doctors, lawyers, and ex-managers. Without complaining and loaded with his bulky photo case, he

toiled up steep paths in the tropical rain to observe mountain gorillas, or like today, climbed down a hill of slippery, moss-covered stones in South Georgia. The weather matched the expectations of a subarctic summer day: 8 degrees Celsius, a stiff breeze and occasional showers.

About 20 male fur seals lay on their bellies along the beach keeping a respectful distance from one another. The tour guide gathered the heated and heavily breathing wildlife photographers around him after they all had reached the beach.

„On behalf of World Wildlife Travel, the leading provider of wildlife viewing tours, I feel honored to welcome you to the highlight of our South Atlantic tour. I hope you enjoyed our little morning walk as much as I did“, he began. Jealously, Mansfield noticed that the guide didn't sound breathless nor was he visibly sweating.

„In this hidden bay you'll have the rare opportunity to watch and take photos of the Antarctic fur seals, *Arctocephalus gazella*. The males weigh up to 215 kg placing them among the biggest seals worldwide. They are native to South Georgia. In the beginning of the 20th century they were driven to the verge of extinction due to excessive industrial sealing. Thanks to strict protection their population has regrown and exceeds one million heads as of today. They enjoy ideal conditions on South Georgia because, as you might know, there are less than 100 permanent residents on the island. Tiny as it looks on the map, it comprises an area bigger than Cornwall.

At this time of year, in their mating season, the males fight for their territories and may be fiercely aggressive. Though they don't feed on humans, it would certainly be wise to keep a safe distance at all time.“

Mansfield lost interest and shifted his attention to the seals. Occasionally one of the males would raise his head and let out a roar, probably a warning or a challenge. Between the males, the much smaller females scurried about. They threw themselves into the sea, pushed themselves ashore, basked in the sun, and seemed to ignore the immobile males.

A youthful and very articulated voice asked: „Do you know, how stone cones like this one are formed?“

The voice belonged to Mahmood Something, a 28 years old Pakistani entrepreneur, no, a British entrepreneur with Pakistani ancestors. Be correct, Bob, Mansfield admonished himself. This guy has been a British citizen since birth. He had made a fortune by selling his software company („You've probably never heard of it") to Google and then decided to take the first holidays of his life.

As he frankly told his fellow travelers, he considered wildlife photography an excellent way of broadening his horizon before planning his next business steps. Before the trip, he had methodically taught himself the basics of digital photography and post-processing. Then he had practiced with his equipment until he was sure to hit all the right settings, lenses and angles in every possible situation. In preparation for the current tour he had meticulously studied the geology, flora and fauna of South Georgia. In this group of wealthy pensioners he stuck out like a sore thumb.

Caught off guard the guide sheepishly asked: „What stone cone?"

Mahmood pointed to a strange cone comprised of loose rocks some hundred fifty yards away on an inaccessible ledge. The igloo-like structure towered four meters high and rocks seemed to be set impossibly loose and steep. In fact, they looked like should have collapsed under its weight – or would any minute. Everyone looked at the strange structure while Mahmood launched one of his much dreaded lectures:

„The structure looks like it has been piled up on purpose and is being stabilized from the inside. But it is known for a fact that the island has never inhabited before its discovery in 1675. And the diaries of the whalers and sealers who were temporarily stationed in Stromness prove that they have never entered this hidden cove."

„Very well observed", said the guide desperate to gain some time for a plausible answer. „The landscape here has been shaped by an alternation of thawing and freezing. Of course, only the uppermost layer of the ground ever thaws. Sometimes the ice will form a bulge, a so-called ice lens, causing the covering stones to assume the shape of an igloo. It's an perfectly natural phenomenon."

„They know we're here!" whistled Viifalura when one of the terrestrial four-tentacle beings suddenly pointed in their direction and all others looked.

„Do be quiet!", Vooraial answered in a low voice with a shrill overtone of urgency, „The protection field will amplify any sound."

„How does the stone cone generate such whistling noises?", Mahmood asked.

„It's just the wind howling through the gaps", the guide answered with a slight touch of despair in his voice.

„This chap doesn't really know when to stop", Mansfield thought and turned his attention towards the seals. He had made a mental note which of the males seemed to be the most impressive one. A close-up shot of the gaping mouth during a roar would certainly make a great and maybe prize-worthy image.

He edged closer until he was just about nine yards away and the fishy, oily smell of the huge male grew unbearable. The colossus lifted his head and stared at him with bloodshot eyes. Hastily, he took two steps back. His right foot slipped and he struggled to keep his balance.

When he looked up again he saw 250 pounds of pure rage heading towards him. He would never have believed that these heavy animals could move so incredibly fast on their clumsy flippers. His first thought was to protect his camera and he hastily raised high in the air when the seal lunged out at him. A sharp pain in right upper arm woke him from his paralysis. He turned and ran.

„Look!", cried Viifalura, „The animal attacked him! There's fluid spurting out of his arm!" In his excitement he stretched out two tentacles to show the direction. Unfortunately, both tentacle tips got caught in the field membrane. The sudden pain made him wince. „Serves him right!", thought Flosiidii without much pity. „Pull back!", Vooraial shouted. „Ouuww! I can't!", whined Viifalura and suddenly released his ink into the water. The whole party was trapped in the dark, not to mention the disgusting smell of the ink, which was why releasing ink was considered unpardonably bad manners.

The group members leapt apart in an attempt to get away from the stench when the protection field shut down. Their mantles violently hit the surrounding rock cone, bursting it apart. Water splashed out and their skin was exposed to the corrosive oxygen atmosphere. Vooraial heroically throw six tentacles into the air to prevent the rocks from falling on their heads. Flosidii came to his aid by grabbing rocks with his tentacles and hurling them away before they could do any damage. With the protection field shut down, the water level dropped quickly following the law of communicating vessels. For a short moment, an attentive observer could have seen a swirl of soft bodies and tentacles. No such observer existed, though, the humans were busy managing their own emergencies.

„Sit down and keep still!“, said Bernhard Schmitt, the retired vascular surgeon, in an amazingly calm voice to Robert Mansfield. The seal's bite had torn open Mansfield's brachial artery, and while everyone else had just watched, frozen with terror, Schmitt had run right up to him. He ripped the belt from his pants to stop the bleeding and shouted at the tour guide, „Get me Gauze pads from the first aid kit! At least two or three! Right now! Man, move!“

Schmitt placed the belt high around Mansfield's upper arm to improvise a tourniquet. Blood from the lacerated artery splashed rhythmically onto his parka. The tour guide handed him two gauze pads, which he placed under the belt on the wound. As the tourniquet began to work, the bleeding stopped. But Mansfield would at least lose his arm if he didn't have surgery within the hour.

Schmitt turned to the deathly pale tour guide, „Can you have the Zodiacs brought here?“

The guide winced and then nodded. Yes, the inflatables should be able to land on this shore.

„Then get them here. And have the ship prepare the OR. Come on man, what are you waiting for?“

In his entire professional life Schmitt had kept assistants and nurses on their toes and the emergency made him fall back in old habits even after four years of retirement.

Meanwhile, the fur seal, having successfully defended his territory, withdrew with bearish dignity. He didn't hold any personal grudge against Mansfield.

While life spurted out of Mansfield's arm, Mahmood took a perfect image of the bursting Stone cone. „It had to be unstable“, he muttered.

Not that he was not insensitive to other people's injuries or pain, quite the contrary: Much to his embarrassment, the sight of blood invariably made him faint. For one short horrible moment he feared that he would have to apply his mostly theoretical first aid skills. But when he saw the doctor hasten towards Mansfield he frantically looked for some distraction that would keep him from fainting. The disintegrating stone cone provided a welcome diversion. But after securing one photo, his vision blurred and he barely succeeded in getting down on his knees to prevent himself from passing out.

To his disappointment he found that water or mud must have smudged the lens, causing strange tentacle-like artifacts on the image file. To remove them, he wrote a whole new filter app. National Geographic later paid him 5000 Dollars for the processed image.

Somehow, Vooraial seems to be haunted by bad luck on this trip. The hasty launch of their space shuttle overheated the anti-grav engine shutting it down at a height of 40.000 feet. After a few nauseating seconds of free fall the fusion engines kicked in. However, this maneuver disrupted the stealth mode and made the 200 feet shuttle visible on radar. For 25 seconds, a large object moving upwards at an impossible speed showed up on the RAF Mount Pleasant surveillance radar displays. Upon the commanders sharp complaint the manufacturer hastily installed a software upgrade that, as they promised, would reliably prevent those malfunctions – and fixed 123 other bugs as well.

Bernhard Schmitt successfully performed a provisional angioplasty in the sparsely equipped operating theater on the expedition ship saving Mansfield's arm until he could be flown to the Falkland Islands for definitive treatment. „I can still do it!“ he told his wife afterwards. „That alone was worth the trip. But

otherwise, you know, all this photo snapping is a really boring exercise." And he added with ultimate disdain, „It's more for internists."

In the King Edward VII Memorial Hospital in Stanley, Bob Mansfield prided himself of having fearlessly faced an onrushing colossus. The impending meeting with his wife lost much of its terror.

On the interstellar spaceship, senior first class scholar Heeriidoo took the devastated Viifalura to task.

„Your incredibly silly behavior has prompted the Wildlife Protection Administration to block all access to the planet, effective immediately. Thanks to you I won't be able to prove my theory. We have no idea why the croakers came to this desolate spot."

Viifalura interwove his tentacles and bent them backwards in an attempt to occupy as little space as possible. In a low, barely understandable voice he answered:

„Most honorable Sir, perhaps ... I mean ... like us, they might just have come to observe the wildlife!"

This answer managed to infuriate Heeriidoo even more. Yellow clouds of rage sprung up on his skin.

„Just do be quiet, you silly tentacle knot! You don't have the slightest idea of proper research!"

Buddha Dies

SVEN KLÖPPING

Translated by Michael K. Iwoleit

They call me Buddha. Which is kind of paradoxical because I'm the best hunter far and wide and not the least inclined to follow the Noble Eightfold Path. I move forward cautiously. The animal must not hear me. The jungle is very densely vegetated here and expansive, but behind it – I know that from my previous life – the tunnels, factories, and mines of the Mars Company already begin. Since we have terraformed the formerly red planet many thousands of years ago, we – consciousness patterns – live in constantly switching bodies. It's a game that the survivors of the blue planet, devastated long ago, have conceived. Actually it's not just a game, more of an evolutionary system that protects and maintains the variety of nature and life. Fifty huge machines hover above the planet and transfer us, based on a refined random procedure, into another body when our time as come. The system decides when it's required and when our time is up. At least that's what most of the other humans think. I personally have tried in most of my lives to discover a deeper meaning behind all the random generators, higher level reality loops, and soul transplantations – that's how I got my name. Even though I'm a hunter, I know that everything is inspirited and has a common origin. You might call it the great „We“. Because we – we are the consciousness copies of the last Terrans that, in a desperate rescue attempt, have been evacuated to Mars ages ago. They didn't have any chance on Earth anymore – too many environmental disasters and wars had rendered it uninhabitable for humans. Only robots and androids live there now. No human soul. We are all on Mars now that has become a kind of second chance

Sven Klöpping, born in 1979, writes poems and science fiction stories since his childhood. He has published numerous short stories in national and international magazines and anthologies and was a frequent editorial helper and contributor of InterNova's mother magazine Nova. Apart from that he contributed poetry to German magazines such as Federwelt and Kult. He edited the anthologie Bullet in 2014, with stories set in his own fictional universe MegaFusion. Some of his tales were collected in his books MegaFusion (2001) and Menschengrenzen (2010).

Translator Michael K. Iwoleit was born in Düsseldorf in 1962 and lives in Wuppertal today. He was educated as a lab assistant and studied philosophy,



sociology and German philology. Since 1989 he is a freelance writer, translator, editor and critic mostly in the science fiction field. Apart from his literary activities he has also worked as a copywriter for advertising and IT industry. He is the founder and editor of InterNova and was the co-founder and long-term fiction editor of its German sister magazine Nova.

for life – a hodgepodge of most diverse life forms, even such that originally didn't come from Earth. We all try to get along peacefully, but it's not always possible. This is why I have decided for the hunt in this life. I pursue a panther currently, because these damned big cats frequently kill our cows, sheep, and xings. But this will end now. Some of the souls have united and formed a kind of alliance against poaching. When we are in the bodies of jungle inhabitants, we hunt. For the sake of all settlers, for a safe life in love and harmony. Because luckily we are supra-physical, so we can always remember what we have been previously and stick firmly to our principles. But there are also dark spots in our memory ... a mystery of the soul swapping system.

I stalk through the scrub, following the trace of the panther that I'm sneaking after for several hours now. He's very deft, knows very well that I'm on his tail, so he constantly changes direction, walks through creeks, erases his traces. Pretty clever for a big cat. I'm still on his trail, though. And I will bring him down, simply because he's too hungry for my taste. When I have killed him, the jungle will do the rest for me, because we don't eat cat meat. My hand trembles slightly. It holds nothing but a simple lance, because any kind of modern weapons are strictly forbidden on Mars. We don't want to cause a second apocalypse like on Earth. Modern technology is only used for the common good here, for example in the mines or the deuterium enrichment plants. You can become very rich, but also lonely and crazy. I'm none of that, I'm simply Buddha – the guy who believes in a higher level soul loop. And if you others are for once honest with yourself, you have to admit that this belief is the only plausible. After all, why should the robot brains, who are programmed to care for the common good of all living beings, have programmed something so arbitrary into their system? They could have left everything to chance and evolution in the first place, without consciousness copies and soul changers ...

I scurry past a few manta bushes whose giant, wing-like leaves provide enough protection to follow the trace without being noticed by other predators. This leads me further away

from the village, straight into the green depths of the forest, into the planet's twilight. The light cones from above sway here with the crowns of the giant trees that majestically stretch towards the sun. The trace is still fresh, not even two minutes old. I squat down, pick up the scent. I smell clearly the fur of the cat that hides on some branch or behind some snake shrub, mocking me. But not with me. I wet the wings of my nose on the inside with some saliva and so can smell the right direction soon. The scent leads me slightly to the right, into a mahogany thicket. I move my head swiftly into all directions, because I have to be constantly worried about my own life here. There are vast numbers of soulless snakes, insects or poisonous frogs who are no soul changers but simply follow their instincts, which means: they fight for their survival. For a lack of time, before the reclamation of Mars, it was only possible to create copies of humans, primates, and wildlife with fairly compatible brains – microorganisms and reptiles had to be captured to be released into the wild on Mars or cloned. Under these circumstances you have to take care as a civilized consciousness pattern that you don't become megalomaniac. After all, there's something sublime about thinking that we, the „immortal ones“, sit a few steps higher on the ladder of life than all the „lower species“ who are limited to a single life to gain some idea of reality. Maybe it's wrong to think that we are „better“, but on the other hand maybe a logical consequence of our development. First we have, as humans, conquered the Earth and then created the robots who have saved us and other animals from ultimate self-destruction – a kind of self-protection. And our goal is again now to obtain superiority. On another planet, under other auspices. This time the system protects us from annihilation. We are only permitted to limited habitats and spheres of influence. I think we're quite good at it. In one of my previous lives I was a rich plantation owner in Lunae Planum. Daily life was amazing, the fruits extraordinarily big and juicy, my purse always well-filled so that I could afford an occasional trip to good old Earth where, among debris, craters, and polluted steppes, only about a dozen giant cities are left that try to sustain in accordance

with the intergalactic treaties. Who knows, maybe one day the robots will emigrate and the Earth becomes Mars and Mars ... no, let's hope that it remains what it is. A playground for the souls. The happy ones. For all those who can overcome death.

The throaty call of a macaw brings me back into the here and now. Thorns scratch my knees above which only a small scrap of cloth covers my crotch and my buttocks. We don't need silk suits out here in the wild, no customs and no champagne mood. We are only primordial men here. And as such we follow our primal instincts: protection of the family, the homeland, the village. The macaw has made me prick up my ears. Less than twenty yards away something scurries through the branches, or have my senses fooled me? No, it must be him. The target of my craving. Too many times has he gutted our lambs, violated our cows. It's his turn now. I quicken my pace but take care to move as quietly as possible through the undergrowth. Just like my prey. Because there is one thing that I have learned in my three and a half lives as a hunter: You have to unconditionally attune to your prey when you want to slay it; you have to exactly think like it. Breathe the same way, hark, pry. A suspicious noise makes me listen attentively. Have these been pointed black ears over there that flashed in a sunbeam? I feel it in all of my limbs that the hunt is coming to its end. I stretch all of my muscles, grab the lance as firmly as I can. Now is the time – man or animal, intellect or instinct, taste or greed. I have to keep on hunting, because we can't allow the predators too much leeway, otherwise we may end up on nature's menu ourselves and our souls might be usurped by low bestial cravings then that surround us in this jungle. Alas, what would I give for a cool mojito at the pool of my former manor house now! Or for a night with my ex-wife whose skin couldn't have been more silky! But these thoughts are too much of a good thing. I shake them off like a dog the water that he has involuntarily bathed in. Then I take up the chase. Whenever I hear something crack, whenever I think that velvety-soft fur brushes a tree bark, I freeze. Even if it's just a harmless rustling of leaves, caused by a wisp of wind or a small bird – my experience has taught me to be absolutely silent

when I perceive something suspicious. Only this way can I get an advantage, approach the source of the noise ... and maybe shut it up forever! The hairs on my arms and legs bristle. They are thicker and longer than those of the people in the cities or the mine-workers. After all, we need much sharper senses in the depth of the jungle. That's why I stand stock-still like one of the young trees that surround me, feel firmly rooted in the ground in this moment, in this planet. Mars – that's me. In this moment I'm one with nature. And maybe my nickname fits me better now. But in the next moment I feel a sudden thirst of blood. Even though wars and combat operations are prohibited by the omnipresent soul system and can be punished with decades of soul banishment, I feel an irrepressible fighting spirit in me. The hunt is an exception. It's the only justification for killing. And in the end it's the source of all the strength that makes humans „more“. Members of the master race? Surely not. But on the threshold of death you sometimes meet the spirit that ordered you to cry immediately after your birth. Cry or die! That's the essence of such moments. For now, however, I still have to stick to the opposite: keep quiet, stock-still – or you will be eaten. It's not much of a challenge to me, since I'm used to it.

The panther ought to be within a radius of about ten yards now. I still listen attentively to any noise that he makes and move only when I'm absolutely sure that I take the right step. A little further to the right, there behind the large orchid, then ...

A sunbeam blinds me. Out of nowhere, it seems. Damn, does it want to annoy me? I can't focus this way. I hear rustling steps, steps of four paws. I raise my lance, open my mouth ...

... and are sucked by the system out of my body. Before I realize what's happening, I'm already in another body. This one, too, is blinded by the light. But it doesn't bother it so much. I look around – here too: jungle. One thing is immediately clear: I have never been in a body like this. It's a completely new experience. Much sharper senses, a completely different kind of smell, hearing, breathing, perception. It is as if I have switched

from a numb hulk into a soft, smooth creature. My ears raise up. They are very pointed and can hear everything in their surrounding. Has this been an insect that made me raise my tail? Maybe. Or it was a delusion. Anyhow, I stand on four legs. And I'm hungry. Very hungry. So hungry that I begin to growl. It seems that I have forgotten a lot of what constitutes my soul. Because right in front of me I see a complete stranger; he looks like he has just woke up from a bad dream. He rubs his face, looks at me, almost drops his lance. A fatal mistake! I use the seconds, extend my claws in a flash, prepare for the jump and ...

Buddha dies.

Project 38 or The Game of Small Causes

THORSTEN KÜPER

Translated by Mike Mitchell

Just pixels.

They're just pixels.

Inquiry after scandal surrounding Chancellor Weveling's New Year Speech

It remains unclear how a person or persons still unknown managed to tamper with the video of the Federal Chancellor's 2011 New Year's Speech broadcast yesterday. Horrified viewers watched for more than a minute as the Chancellor gave his speech to the nation, apparently naked and sporting a Hitler mustache. Experts described the tampering as technically exceptionally complicated ...

Am I a grotesque sight?

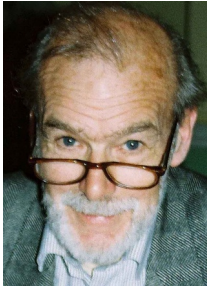
Probably I am. A lifeless body in a chair facing the three monitors on which you can see this recording: me wearing the same clothes and with the same face as the corpse on the other side of the screen. The living reflection of a dead man.

Tell me, do I have a strange expression on my face now that I'm dead? Is my tongue hanging out? Can you see the whites of my eyes? Do I already smell? I wouldn't like that. If that's the case, push my wheelchair out into the neighboring room. I myself would hate to have to sit next to the stinking, putrefying corpse of a complete stranger and listen to him going on and on. Then you sit yourself down in the chair by the wall behind you.



Thorsten Küper, also known under his Second Life alias Kueperpunk Korhonen, was born in Herne in 1969. He is a physicist, writer, blogger and citizen of virtual worlds. He has published stories about virtual reality, surveillance, media and technology in magazines such as c't, Gee, Exodus or Nova and various anthologies. He has also written numerous satiric short texts that he likes to perform live as well as articles about science, virtual

reality and art, among others in Telepolis. Together with his wife Kirsten Riehl aka Zauselina Rieko he is well-known for organizing literary events in the virtual world of Second Life. His first story collection Belichtungszeit was published in 2023 by the Cutting Edge imprint of InterNova's host publisher p.machinery.



Mike Mitchell, best known as a translator of classic and contemporary German literature to English, was for many years an academic with a special interest in Austrian literature and culture, before he became a freelance literary translator in 1995. He has published ninety-nine translations from German and French, including Gustav Meyrink's five novels and The Dedalus Book of Austrian Fantasy. His

At least you're here. That means you've traveled to this town, gone to the locker where you found my address and the key to my apartment. If you should wonder how I managed to inform you post mortem that I was dead, just have a look at my left wrist and the wires running down my collar. You've probably already worked out the principle, after all, you've an analytical mind like me. The sensors on my chest and wrist measure my heartbeat and pulse. Once the computer hadn't recorded any signs of life for two hours it sent you the email with the codes for the locker and my machines. It worked because you're here, you've entered the password and now you're watching this recording.

I wasn't quite sure when I would die. Naturally I couldn't avoid dying, but the desire to exercise control was a fundamental element of my personality. So I wanted at least to decide on the posture in which I would cross over to the other side, as the ultimate proof of my lifelong defiance. Cowboys are supposed to die with their boots on, so men like us ought to cross the Styx sitting at a keyboard. For me that makes sense. The most important moments in my life have been spent not with people, but together with machines.

I don't know the precise cause of my death, but at least it was a natural death. To go by the pressure and pain I felt during my last eighteen months, I would go for a tumor behind my right eye. A consequence of the radiation. Above all from monitors and display units. Diffuse X-radiation, microwaves, infrared, UV light. I've spent too much time exposed to them, toasted my brain. But I did it voluntarily. Do you know why? Did you ever ask yourself that question?

I can answer it for myself: we've never been fond of each other, the real world and I. The real world rejects my expectations, hopes, desires. That's why I've always hated it and tried, as far as possible, to model it. Oh yes, there are ways and means. But to do that you have to take up a position outside the real world, leave it behind you. And that is what I've done. That is why I haven't left this apartment for the past eight years.

If you wonder who put the key and the address in the locker, it was a pizza delivery boy. The guy who's been deliver-

ing no. 12, no. 72 or no. 112 for years and who, after some research, I classified as reliable. To make sure he really did deposit the key, I got him to film the whole business, from here to the station and himself depositing the things.

That was nothing new for him. Some years ago I built a camera he could attach to his spectacles. He got it for nothing and in return he slept with girls now and then and . . . well . . . wore the glasses. He emailed me the films. I'm sure this revelation of my voyeuristic leanings won't shock you. After all, pornography was one of the subjects we used to discuss regularly. That and our preference for exercising control one way or the other. And in my own mind I'm sure the two things are directly related. There were almost no real relationships at all in my life. Not for lack of opportunity, no, but because real people have a life of their own, I can't just move them around them like characters in a story. At least not directly. That's why I've always preferred artificial partners — even if they only existed on a monitor or as holograms.

Am I boring you? You haven't come to admire my corpse or listen to my self-analysis. It's my masterpieces you're interested in, isn't it? Calling them 'mere programming' I would take as an insult. For me it's always been a genuine art form.

I was nine the first time I felt a computer keyboard under my fingers. A box with a slow processor and a clock speed well below a gigahertz. A simple machine, not much more than a toy, really. They'd given it to me because it could be used from a sickbed. I've spent most of my life sitting or lying down. You won't be surprised to hear I always dreamed of driving a car. Unfortunately it was a dream I never managed to translate into reality. Nor have I ever been able to leave this country. And that I spent the last few years entirely in this apartment is not news to you.

But back to that computer. It changed my life, reprogrammed it as a virus would. From the very first I was obsessed with the keys, the clicking noise, the monitor, the bluish light that became more familiar than daylight. I started to learn, wrote programs, built simple robots, circumvented the copy protection of games and soon discovered the Internet. I was

*translation of Rosen-
dorfer's Letters Back to
Ancient China won the
1998 Schlegel-Tieck
Translation Prize. The
translations that he
generously permitted
us to republish in this
InterNova issue are
from Franz Rottenstei-
ner's The Black Mirror
and Other Stories: An
Anthology of Science
Fiction from Germany
and Austria (Wesleyan
University Press,
2008), his only foray
into science fiction.*

just eleven when I entered the World Wide Web for the first time — and got caught for ever in the net. Do you know what my motivation was for becoming a hacker? Apart from technical curiosity, I mean?

You'll be disappointed. My first hacks were into porn sites. I got access to thousands. But the things I learned in my hunt for material for a jerk-off formed the basis of my later career. That and my obsession with films and novels. I love a good story. Don't you?

My own life was part of one. It was tragic and there wasn't much humor in it. But there were lots of very ironic moments. Sometimes I ask myself who wrote the story. It certainly wasn't me.

I like to imagine my story as on the epic scale. A fat tome with thousands of pages. But perhaps it's nothing more than a few lines of faulty code in a big program. Just like the faulty code in the program of my cells.

It didn't kill me, but it did make my body all but useless. There are worse hereditary diseases than the one I suffered from. But it left me weak and unable to move, condemning me to spend a large part of my allotted term in enclosed rooms. On the other hand it is this peculiarity in my DNA that I have to thank for everything I've achieved in my life.

Perhaps you're grinning. What did that old bag of bones in the chair over there think he'd achieved? Shut away in this dark room, vegetating his lonely, fusty life away. But before you laugh, just think very carefully about your own life. Come on, get closer to the monitor and listen carefully.

I've made history, I've made headlines — and I mean that literally, damn it! I thought up what must be the most immense dramas of all time and staged them. I made people dance like puppets on a string, made them into dancers and choreographed the dance.

What's the old fool on about? you'll be wondering.

Do you remember those long philosophical discussions we used to have about real-time simulations? The first ones came onto the market when I was still a child. You could become a medieval knight, manage a fairground, be a Roman general

fighting the Teutons, or a German general in the Second World War only a few kilometers outside Stalingrad. You could have lots of new lives, always going back to the beginning again.

To restart. With more life. Quicker, stronger — healthy. That was what normal life refused me. In the games you could create miniature worlds and experiment with them, make economic cycles function as precisely as clockwork or plunge a tiny universe into chaos — just for fun. I spent whole days and nights being Napoleon, Hitler, Alexander the Great or a Greek god.

Control. That was what it was all about. I was obsessed with the idea of exercising control, with the feeling I could change destiny at the flick of a switch. Cause and effect, the old, old story.

But I didn't want to be the slave of effect, I wanted to be the cause.

Sometime during puberty I became truly aware of my situation, realized for the first time how many things would be denied me in my life. And that made me angry. They sent me to a psychotherapist, they even set a priest on me who tried to switch my brain onto a religious track. I was sixteen and I saw clearly that the longest journeys in my life would be those to some specialist or other who saw me as a great subject for his research. And the Bible-basher had no other idea than to try and persuade me this shit was meaningful. In their professional blindness these clerical imbeciles see every misfortune, every catastrophe as serving some higher purpose — which is, of course, far beyond the understanding of us ordinary mortals. It must really be very comforting to be able to wrap yourself up in the warm fleece of that ignorant illusion.

Hacker attack on Vatican web page

On Saturday night some as yet unidentified person or persons managed to take over the Vatican website and tamper with it. For almost twelve hours online visitors to the Vatican were shown pornographic pictures and films instead of the public archives of the Catholic Church . . .

A few days after the priest had tried to sell me that garbage someone penetrated the Vatican website and turned it for almost twelve hours into a portal to pornography. It was called 'We have a long tradition of body piercing too' and had a lot of hits.

It was my first real hack. Oddly enough, after it I realized that the priest was right when he said there was meaning to my illness. It had forced me to live cut off from the world and thus allowed me to develop my talent in peace. A talent I now employed for my very own work: new real-time strategy games.

An autopsy instead of a music video

For several minutes a video of the English boy band 'Fungermis' broadcast on Channel S had pictures of the corpses of the five musicians superimposed over it. A week previously the group, together with their manager and two of their wives, had died in a tragic helicopter accident. A spokesman for Channel S expressed the management's regret at the incident and said any employees involved would be duly punished. So far investigations suggest the images were inserted from an external source . . .

For example I managed to hack into the transmitter of a music channel. One of those boy bands had just been wiped out in a helicopter crash and they put on a tribute program. Instead of a video of their idols, the dear little fans had the opportunity to enjoy pictures of their autopsy which, as if by divine intervention, suddenly appeared on their screens. A nasty piece of work. That afternoon lots of little girls had tears pouring down their cheeks while I could hardly stop laughing. For some reason or other I stuck to that line and kept directing my operations against the media.

Multiple pile-ups in Munich, Berlin and Hamburg

Yesterday morning there were large-scale pile-ups in the centers of Berlin, Munich and Hamburg. How they happened is still a mystery. Eyewitness accounts all agree that the lights

turned green in both directions at the same time in all three cities. The theory put forward by several commentators that some unknown person or persons had obtained access to the traffic control system was described by experts as unlikely.

Okay, so I tried my hand at the standard tricks as well and switched all the lights in the center of Berlin, Munich and Hamburg to green at the same time. But it did nothing for me. It had no real meaning, no message. Even then for me the game had satisfy artistic demands.

It was more fun smuggling doctored pictures into news broadcasts. A few years earlier that would have been unthinkable, but more and more the cameramen were sending their pictures to the agencies via the Net in digital format. If you knew how, you could plug in, capture films at junctions, then modify them and replace the correct versions on the servers with the falsified ones.

Education Minister interviewed by penis

Thousands of shocked viewers phoned or emailed TPO about a press conference by Education Minister von Hohenried they broadcast yesterday. Instead of a microphone, the Minister appeared to be speaking into an erect penis ...

I'm sure you remember my old trick of making politicians speak with an erect cock in front of their face instead of a microphone. To swap a microphone for a prick was child's play even with the software available then.

Minister of the Interior Karenbaum laments her lack of sexual intercourse

Once more an unknown hacker has succeeded in getting a doctored film broadcast. The clip had been tampered with in such a way that the Minister appeared to reveal some disconcerting details about her private life. It was later reported that Frau Karenbaum was distraught at the things that had been put into her mouth ...

A variation was to put words into their mouths. A little later there was even software which allowed me to synchronize their lip movements. For example a minister who belonged to one of the conservative parties suddenly apologized to viewers for all the nonsense she'd come out with over the last few weeks. The reason, she said, was her lack of sexual intercourse. This gave an entirely new meaning to her concluding remark, which was left unchanged, namely that it represented a challenge the whole population had to take up. More than one such clip was broadcast because they didn't realize I was mucking about with their systems. It was hugely embarrassing for the politicians who liked the sound of their own voices, and heads rolled at the broadcasting companies.

Robots create sculptures from automobile parts

An extraordinary incident occurred yesterday at the Dortmund factory of a large German automobile manufacturer. For almost an hour the robots on several of the production lines where the bodywork is welded were affected by a fault which is said to lie in the factory computer network. The management has denied reports that the machines used car parts to make sculptures which resembled a hand with the middle finger¹ raised. However, for several hours now a video has been available on the Internet purporting to show one of these sculptures being produced — filmed by a works surveillance camera . . .

I call myself a real-time satirist — and an extremely successful one at that. Naturally I remained anonymous. A phantom that attracted imitators, though none was as brilliant as I was. Unfortunately I knew it and that made me want to show off. It also made me careless.

At that time I was out to get a particular firm which was screaming its head off for people on welfare to be sent as forced labor to their factory. I did a little research and found out that the firm had been in existence during the Third Reich. And back then it had employed forced labor.

Hacker arrested

Yesterday a twenty-year-old man from Berlin was arrested in connection with a hacker attack on the German firm of Syberg-Hetzler. He was accused of having obtained unauthorized access to the company's central computer network. During the attack all the lights in the building were put out, apart from those in around fifty rooms, which had been chosen in such a way that the illuminated windows formed a swastika. As well as that he sent, from email accounts belonging to the company, a million emails quoting the words above concentration camp gates: 'Work makes free'. Nothing is known about the reasons for the attack; it is possible the man was politically motivated. The accused suffers from a severe muscular disease and a police spokesman described him as 'psychologically unstable' ...

They caught me shortly before my twentieth birthday. It was my weak point that brought it about. I had to work from my apartment, I couldn't hide my identity by going on the Net from public terminals, as other professionals would have done. They couldn't put me in the can, but they did send me to a hospital for convicts. I spent fourteen months in there, cut off from my usual environment and from my beloved computers. It was pure hell. I was surrounded by scum. You know what they say about what happens to eggheads like us in jail. The truth is even worse.

So I retreated even farther inside myself, buried myself in books, read everything I could lay my hands on. The result was a seething cocktail of ideas in my head which went far beyond anything I'd previously planned. The prison hospital was a kind of reaction vessel and the books enzymes setting off a chemical reaction in which I was developed, transformed. Whatever.

Have you ever seen the high-resolution pictures from surveillance satellites? Simple geometrical images giving a bird's-eye view of buildings and streets and troop movements? In a picture like that a nuclear warhead consists of just thirty-eight pixels.

Thirty-eight pixels added to the computer as if by magic where the CCDs of the camera lens have never seen any. Do

you really believe thirty-eight pixels would be a serious challenge for someone like me? I was the man who had made the Chancellor give his 2011 New Year's speech naked and with a Hitler mustache.

Are you wondering whether I put my idea into practice? Are you trying to work out which military conflicts of the last few years, triggered off by the search for supposed weapons of mass destruction, were staged by me?

Perhaps it was a good thing I'd come to their notice. That talent scout appeared the day before my release. With him everything ended. Or began. Even today I can't quite say which.

He wanted me to do 'it' for him. That's exactly how he put it and he wasn't even aware of the ambiguity. By 'it' he meant modeling, manipulating reality. He was a big shot at one of the big broadcasting companies and he wanted me to put the skills I'd used against them at their disposal.

I'm afraid I'm going to have to disappoint you if you imagine I'm a rebel who stuck to his principles. Young and vain as I was, I felt flattered rather than bought and did precisely what they wanted. In return I got the latest technology, giving me opportunities that were previously unavailable to me. Of course I didn't have an office, nor did I figure on their list of employees since they didn't want their name to be connected with unjournalistic and inauthentic pictures. I produced films for them that were not the way they'd been shot and in doing so I learned how valuable images are. Especially when they do not correspond to the truth.

Party leader resigns

Werner Gilgenforst has announced his resignation. The reason was the suspicion still surrounding him, but the step should not, he insisted, be seen as an admission of guilt. It was a decision taken in the best interests of the Party, whose success was more important to him than his personal desire to stay on as its leader. Even after experts had proved that the video showing Gilgenforst accepting an attaché case was a fabrication, the rumors that he might be involved in some kind

of illegal payments refused to go away. Chancellor Weveling expressed his dismay ...

My job was to create explosive footage that could be used in current affairs and news programs. They could happily broadcast everything I fabricated by declaring it was from a 'dubious source' but still broadcasting it. More than once a politician had to go, even though experts assured the public that the film showing them accepting money was not authentic. The damage to their reputation from the fuss was enough to ruin their career. The rules of the game in such a superficial society are simple and harsh.

This work brought in loads of money. And I really enjoyed doing it, believe me. But if you're selling news, you're selling an ordinary product that's only in demand when it's unique and, as far as possible, exclusive. News has a value which depends on the speed with which it's brought into circulation. That raises two problems: in the first place you never know when something's about to happen and in the second there are long periods when nothing happens at all.

I was twenty-two when I called the guy who'd come to the prison hospital to offer me the job. I had a proposal – something so completely out of the ordinary that would revolutionize the media. I managed to persuade him to arrange a secret meeting with the top management. I remember it was in an old monastery of all places with an incredibly large open fire crackling in the grate.

'Putting it crudely, there are two stages in manipulating the news,' I told them as they listened with large glasses of wine in their hands. 'You are at the first stage, gentlemen; you manipulate images, that is, the result of an event. The second stage would be when you manipulate the cause of an event.'

The three guys showed no reaction. One forced a smile that was either mocking or embarrassed, I couldn't say. But at least he went on to ask how I proposed to manipulate the causes of events.

I must have looked pretty pompous and arrogant when I said, 'By triggering them off myself.'

Then I showed them the pictures of the pile-ups in Munich, Hamburg and Berlin, explaining that they were the result of someone hacking into the traffic control systems. Naturally I didn't say that I was the hacker, but I assume the idea would occur to them.

Their response was by no means as enthusiastic as I had hoped. Hacker attacks, they protested, could be traced back and, anyway, arranging an accident like that was beneath the dignity of a responsible journalist. They didn't take me seriously, so they hid behind principles which were totally alien to them. But before they could leave I switched on a computer animation. What they saw at first was just swarms of tiny little dots of various colors making their way through a maze and concentrating at one particular spot. At that point they probably did think I really was mad, but when I explained what they were watching in a simulation and what I was suggesting, the atmosphere in the room changed.

Serious disturbances in Berlin, Bonn and Duesseldorf

There were serious disturbances in the city centers of Berlin, Bonn and Duesseldorf last Sunday. Unauthorized demonstrations organized by extreme right-wing groups collided with rallies of the extreme Islamist 2015 Jihad. In the course of the ensuing clashes four people were killed and several hundred demonstrators as well as forty police suffered injuries, some serious. Two people have since died from the injuries they sustained, a further twelve are still in a critical condition. Initial estimates put the damage to shops and vehicles at over twelve million Euros.

I consider myself an individualist, an egocentric and an eccentric. I believe self-determination is possible, at least within certain limits. But I am also convinced that most people are incapable of behaving independently. Their actions are subject to statistical laws comparable to the physical equations describing the flow of a liquid.

The real-time strategy games I played as a child were a by-product of research into artificial intelligence and simulations which could extrapolate the development of a society. In recent

years that has led to social sims which claim to be able to predict the behavior of large groups of people. Among other things, they are used to test out on computer models the effectiveness of escape routes in large buildings. The police use them to work out the best way of shepherding rival groups of football hooligans to and from the stadiums. As well as critical points on a preset street map, these programs also provide estimates of possible damage and the number of victims. Basically there was no difference between them and the games I played as a child. So I played with them. With the one difference that the games were no longer only played out on a monitor.

As well as the great mass of mindless hangers-on hurling abuse, every extremist grouping in the world has an intellectual core. And just as moths are attracted to the light, the elite of these movements are attracted to the modern media. Did you know that the webspace taken up by fascistic material is twelve times that of the Catholic Church? Thousands of terabytes of fascistic ideas are buzzing round out there. Only pornography takes up a greater proportion of the volume of data.

Extremists coordinate their operations through their websites. They announce assembly points and starting times for their demos on their websites, send plans of their operations by email. None of it particularly securely. Religious fundamentalists aren't much different.

Take the Neonazis, for example. All you have to do is manipulate their websites so you can spread rumors about a coming demo and slip in a few provocative bits of 'inside information' about the fuzz wanting to ban it. You do the same to the other side — let's say Islamic fundamentalists — and with a street map and a social sim you can develop a couple of wonderful scenarios by working out the critical points where the two streams of hotheads will collide in a seething maelstrom of aggression. It allows you to find the points where bringing the two sides together will produce the most violent result. You then announce the times and places on their websites and in their chat-rooms so that they all see them, but too late for one of the genuine organizers to scream, 'Hey, that's not something we planned.'

It's all mathematical and very scientific. People become twitching colored splodges on a display before they become twitching red splodges on the asphalt. The great thing is that the social sims provide remarkably good information about where to set up your cameras to film the whole thing.

That is precisely what my friends from the management decided to do and they were very satisfied with the results. Their sensational footage of a mini civil war in our country immediately propelled their station to the top of the European TV league. And this time the pictures were authentic. Not doctored, not tampered with, not manipulated. The effect was genuine, though the cause wasn't. We'd reached the next stage of the manipulation of news. The disturbances had been brought about by tiny alterations to some fanatics' information network. A small cause which produced a huge effect. We hadn't simply applied a light to a powder keg, we had thought up the incidents, worked them out in advance. We had shaped an event. I'm not sure, but I'm probably the first event designer in the history of the modern media. At least the first to call himself that.

Do I feel guilty because people died? There were four, though the social sim had estimated the number at twenty. No, I do not feel guilty. We just gave them the time and place. What they made of it was their affair. They could always have stayed at home and watched the show on TV.

Opposing gangs of hackers turn computer networks into virtual battlefields

It seems certain that the train collisions in Hannover and Stuttgart as well as the plane crash in Dortmund and the collapse of the power supply system in the Ruhr are the direct result of the activities of German hacker groups. According to an eighteen-year-old student arrested in Duesseldorf yesterday, there is at the moment a bitter power struggle going on between rival groups involved in computer crime. Unconfirmed reports from inside the hacking scene suggest there is a new trend: using hacker attacks to set off disasters in which opponents are eliminated not only at the computer, but in person.

A spokesman from the Federal Criminal Investigation Agency described such speculation as pure panic-mongering ...

My first success had at least demonstrated the enormous potential of designer events. The basic principle was simple: a small, extremely inconspicuous cause producing the greatest possible effect. The important thing for my paymasters was to know the when and where so they had a head start in reporting these effects.

The game had a whole host of variations. Some months before a project was carried out warnings were placed in current affairs programs of the danger of this or that group that was being set up or restructured: militant opponents of genetic engineering who preferred Molotov cocktails to arguments; sects trying to buy up small towns and clashing with the inhabitants; gangs of youths and children engaged in bitter struggles for territory; animal rights extremists who wanted to liberate infected laboratory animals. Things almost always turned out the way the journalists had warned months previously.

The problem was that my paymasters, for all their initial hesitation, were soon straining at the leash. They wanted more and more projects, they demanded I 'think big' and they offered me immense sums of money.

Young, stupid and vain as I was, I went along with them. At a further meeting in the old monastery I gave a presentation of my latest project. Again they had large glasses of wine in their hands. This time it looked like blood.

We called it Project 38.

How much attention have you been paying? If you've been listening properly you already know what Project 38 is. Don't you?

Thirty-eight pixels. That's all. Thirty-eight pixels. A tiny cause. I took the money and did it. But the feeling wasn't what I'd expected.

Another night of heavy bombing in El Herain

As on previous nights, the city of El Herain was once more subjected to heavy air raids yesterday. According to the US,

the attacks were directed solely at military targets. However, the fact that the stream of refugees heading for the southern frontier has almost doubled every day suggests that is not the case.

As was revealed only today, on Wednesday night US helicopters fired on a convoy of refugees which in the dark was erroneously taken for a military transport. According to American sources there were around twenty-five dead; local Islamic groups put the numbers at several hundred ...

You can't hack into the connection between a satellite and the earth station. To that extent the system is safe from attack. But the data's not evaluated straight off the dish, it's sent on more or less unexamined. Along supposedly secure cables, with supposedly secure encryption. Their image analysts are in a quite different place. If you know where and if you've cracked the encryption method, you can cut in and change the images.

Even a good hacker couldn't manage that. Not with the technology available to him. But I had two mainframes working for me alone. The latest encryption and decryption technology. And I did the thirty-eight pixels for them.

CNN gained its leading position through its reporting on the Iraq war. That was what my paymasters wanted. All they needed was a suitable war. And I put together a suitable cause for it.

Thirty-eight pixels.

No more than that.

They'd done a deal with the military dictatorship of El Herain. If there were to be a military conflict, our journalists would be allowed to stay in the country and continue reporting unhindered. When the evil dictator signed the contract he could have had no idea that war would break out only a few months later. But he stuck by the contract, not least because there was a juicy sum in it for him and the rent for large villas in countries with no extradition treaties aren't exactly low. So some top reporters became embedded journalists, but not with the Americans, where all the big agencies had people. No, this special group worked among the ranks of the enemy and for

the first time showed the world the bad boys' perspective. To be honest, I would never have thought they would find anyone stupid enough to run away from US elite units holding a camera. But my paymasters found almost a couple of dozen such lunatics.

The pictures were fantastic. Among other things was a convoy of refugees American helicopters had torched. But there was still enough to be seen. The charred bodies. These weren't fanatical idiots like the Nazis or the 2015 Jihad people or those moronic pseudo-hackers. They were old men, women and children. Now little more than lumps of cinder.

Just pixels. It's just pixels on my TV.

For five minutes I tried to persuade myself of that, then I spewed up over my keyboard and spent the next twenty hours sobbing and trembling. Too bad I hadn't realized I had a conscience. And it wasn't exactly gentle in the way it announced its presence.

Two days later I donated almost all my money to some aid organizations. I would have loved to donate my guilt as well, but they let me keep that. That and the knowledge that I was the first man ever to have set off a war all on his own.

I think they're still looking for the weapons of mass destruction that never existed.

Are you wondering what kind of weed the dead old bag of bones in front of you must have been smoking to come up with an ego-trip like this? Or have you taken the next step and started asking yourself what all this has to do with you?

The fact is, I'm dead and you're here. The question is, what are we going to do about it?

Let me put it this way. I'm a pigheaded guy, so pigheaded that I refuse to let even my death stop me from setting things up.

Have you been reading the papers in the last few weeks? The tension between China and Taiwan has been mounting, mounting so much that American and Russian aircraft carriers are worryingly close to Taiwan. Not too close, of course. No, I'm not trying to tell you I had a hand in that. It's nothing to do with me. It's something quite different I'm after.

People have become accustomed to this kind of situation. Conflicts like this keep cropping up, though the last war was almost ninety years ago. This generation has no idea how quickly these things can escalate. But I've spent most of the last few years working on my models and simulations. I've done a simulation of this conflict among others and in recent months it's turned up a few pretty nasty scenarios. Let me put it in one word:

Boom.

Perhaps my simulations are wrong. Perhaps they're not working correctly because they're trying to extrapolate the behavior of completely different cultures and societies in a conflict situation. The data they're based on goes back to the Second World War and lesser military crises of recent years. But if they are right, I wouldn't be surprised if the lights don't go out all over the world soon.

If we want to stop them getting at each other's throats we'll need to think up something pretty special. Something to divert their attention away from each other. Even better would be something to compel them to collaborate instead of wasting their time on their petty disagreements.

It must be something large-scale and very frightening. Something that scares them shitless and throws them into each other's arms.

Shall I tell you something? I've got an idea. Actually it's not even one of my own, but I think I'm the first and only person who could put it into practice. If it wasn't for this thing behind my right eye. A side effect of my life's work, so to speak. The tumor's done a good job and killed me.

Which means someone else will have to do it.

Someone who's good enough.

Someone who's like me.

Someone who is me.

You.

Now you're wondering what the old bag of bones wants you to do? The faceless stranger with whom you spent whole nights talking about philosophy, politics, physics, pornography and real-time strategy games. Who gave you tips about hack-

ing. With whom you've absolutely no connection apart from words exchanged via a monitor.

At least we have one thing in common. We're passionate about games.

I could never accept that I had only one life in this great game. And such a limited one as well. No, I wanted the full version, I wanted to be able to start again from the beginning as soon as the big 'Game Over' appears. I was young and I thought no end of myself; I thought I was a kind of god and I had enough money. My paymasters had good connections and were ready to grant my every wish, no matter how out-of-the-way it was.

All I had to do was jerk off into the beaker. The rest was done by some biotechnology freaks. Finding a surrogate mother was no problem.

How is she, by the way? Have you heard from her lately?

No, to be honest I'm not really interested.

Perhaps you still haven't got the message? No, I very much doubt that. You have my analytical talent, in fact the map of our brains is identical: you're my clone. A copy of me.

I'm the 'Game Over,' you're the 'Restart'.

You have doubts about my story? Have a good look at me. Not my double chin or gray beard. Don't you recognize my eyes? They're the same eyes that look at you every morning out of the mirror. Gray-blue. And there are more similarities, aren't there? Our hands, our faces, our physique, our tendency to corpulence. Are you still resisting? You'll lose out in the long run, believe me.

And if outward appearances don't convince you, then perhaps our inner similarities will. Our intellect, our tendency to withdraw into ourselves. Our fear of open spaces, which has made you as isolated as me over the last few years. And our shared predilections.

You are me. Only twenty-eight years younger.

The disease, you say? What about the disease? When I was born no one even knew there was a gene that caused my illness, never mind looking for it beforehand. But in the year before you were born, they found a way of eliminating the bad gene. Only then were you possible.

You don't need to call me Pop. I'm more like a long lost twin brother.

But that's enough family nostalgia.

You have two minutes from now to make up your mind. If you press 'enter' you will have access to all my software and all the information about my project. Let's just call it Project 39.

If you don't press it, all the data will be deleted, all the disks reformatted and all my knowledge will be lost. You'll leave the future to chance — at least that will save you from an immense responsibility. It's not a bad alternative, though I'd have chosen the other one.

Of course, the fact that you are a copy of me doesn't necessarily mean you'll act like me.

Perhaps I should express my regret that we never met personally? I haven't because it would be a lie. Things have taken the course I foresaw. You are here, therefore I am dead. I don't need to add that I'm not a hundred percent happy with that.

Let's leave it at this: I wish you all the best with the choice you make.

Make more of it than I did.

PRESS ENTER

ESA confirms reports of an object beyond the orbit of Pluto

At a press conference yesterday the European Space Agency announced that American, Russian and Chinese observation satellites as well as space telescopes had located an object beyond the orbit of Pluto which emits strong energy pulses in the x-ray range. Suggestions by experts that the pulses had the character of signals have since been confirmed, though this fact should not automatically be taken to mean the craft is controlled by intelligent beings.

Russian astrophysicists have gone so far as to claim their space telescopes have detected, in the optical spectrum of the object, indications of processes which suggest an emission of plasma consistent with a power module.

Despite the tense political situation there is at the moment an active exchange of information between Russian, Chinese,

American and other international experts. Even the faint possibility of first contact with an alien life form renders any earthly conflict insignificant, the US Secretary of State declared, a response which the Chinese leadership endorsed ...

Just pixels. They're just pixels.

Planck Time

MICHAEL K. IWOLEIT

Translated by Mike Mitchell



Michael K. Iwoleit was born in Düsseldorf in 1962 and lives in Wuppertal today. He was educated as a lab assistant and studied philosophy, sociology and German philology.

Since 1989 he is a freelance writer, translator, editor and critic mostly in the science fiction field. Apart from his literary activities he has also worked as a copywriter for advertising and IT industry. He is the founder and editor of InterNova and was the co-founder and long-term fiction editor of its German sister magazine Nova. In the science fiction scene he is best-known for his novellas

'There's a quite simple explanation,' said Harold. He was a short, notoriously good-humored man with receding hair, the beginnings of a paunch and rings under his eyes; no longer quite the great organizer and motivator of his earlier years, he was still astonishingly energetic for a man just turned seventy. And still a lot more on the ball than Konrad. 'Your problem's Adam's navel, of that I'm quite sure.'

Harold had supervised Konrad's doctorate. They had met again a few years ago at a reception given by a firm that ran genetic databases. Harold still had a half-time position on the advisory board and had offered him a job. However, by that time Konrad had already decided to give up research in order to pursue his interest in writing and try to establish himself as a science journalist. He remembered Harold as a hard taskmaster who would stop at nothing to worm the maximum their talents would allow out of his students. But Harold was also impressed by people who were willing to take a risk and so he'd offered to help Konrad in his new career. Konrad could always rely on him when things got difficult — though that didn't mean the old man made it easy for him.

'I've been accused of many things,' Konrad growled, 'of being lazy and disorganized, of lacking discipline and concentration, but that that's my problem . . .'

'You disappoint me, my son. My mind was sharper at your age. But that's probably our fault. If we hadn't spent so much time in the eighties boozing, snorting and sleeping around, your generation would have better genes.' Unshaven, casually dressed and with one elbow on his desk, Harold was sitting in

an office that was bigger than Konrad's apartment. A woman's hand, elegantly manicured, appeared on the screen and placed a cup of coffee in front of him. He grinned, like a patriarch who can have the prettiest girls come running at a click of the fingers. 'Don't say you don't know the story? In the old days we used it to catch out the Christian fundamentalists who protested at public meetings against the teaching of evolution in schools. That ring a bell?'

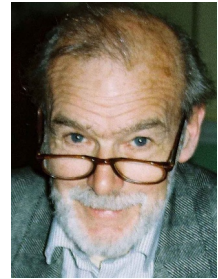
'No comment.'

'Oh the ignorance of youth! It goes roughly like this. Just ask one of these peabrain who take the Biblical account of the creation for the literal truth whether Adam and Eve, the first human beings, had a navel. If they didn't, then they obviously lacked something and were not complete human beings in the image of God. If they did, then they had a bodily feature that came from their birth and they can't have been the first human beings. For a long time it was a genuine problem for theologians and the Christian painters of the Middle Ages and the early Renaissance could not agree whether they should paint the couple with navels or not. You can't imagine the knots the defenders of the pure faith would get themselves tied up in when I put that to them. It was great fun, but the real joke was that virtually none of them knew that one of their fellow believers had found a solution as long ago as the middle of the nineteenth century —'

'I remember now. Philip Henry . . .'

'Correct. Philip Henry Gosse, an important British biologist and the author of an obscure work called *Omphalos*, which was published in 1857, that is two years before Darwin's *Origin of Species*. It's a remarkable book in which Gosse deals not only with Adam and Eve's navels, but also with the fact that they presumably had hair, nails, teeth, bones and all sorts of other parts of the body which usually show signs of growth. Worse still, there is overwhelming evidence that the earth and life on it are much older than the four or six thousand years the Bible allows — geological findings, fossils, long-lived micro-organisms, biochemical affinities between species and so on. Poor old Philip was torn this way and that. On the one hand he was a scientist

and for his essays about major short story writers in science fiction. His latest book is a reissue of his novel Der Moloch. His homepage is at mki.worldculturehub.net



Mike Mitchell, best known as a translator of classic and contemporary German literature to English, was for many years an academic with a special interest in Austrian literature and culture, before he became a freelance literary translator in 1995. He has published ninety-nine translations from German and French, including Gustav Meyrink's five novels and The Dedalus Book of Austrian Fantasy. His translation of Rosen-dorfer's Letters Back to Ancient China won the 1998 Schlegel-Tieck Translation Prize. The translations that he generously permitted

us to republish in this InterNova issue are from Franz Rottensteiner's The Black Mirror and Other Stories: An Anthology of Science Fiction from Germany and Austria (Wesleyan University Press, 2008), his only foray into science fiction.

who could not simply dismiss empirical data. On the other hand, as a respectable Christian he could not cast doubt on the truth of the divine revelation. So what was he to do? That was when he had one of the most brilliant pieces of lateral thinking ever to occur to man. Gosse claimed that God had indeed created the world four thousand years ago, including all the characteristics which give the impression that the earth and its creatures are much older, that is the traces of a past that had never existed. Whether the Lord did it to play a joke on us or to test our faith is another question. Whatever, Gosse didn't have to reject any empirical evidence and his solution was still consistent with the Biblical story of the creation. Fantastic, isn't it?

'But I don't see what that has to do with my current research.'

'So what? You didn't call me to help you along with a few crummy little routine stories, did you? You're short of money, am I right or am I right?'

'How well you know me.'

'Good, then don't spoil my punch line.' Harold leant back, exuding smug complacency, took a sip of coffee and pulled a face. 'You know you can always learn something from old Harold so pin your ears back, this is it. At the time Gosse was laughed out of court – even by the theologians he was trying to give a scientific basis for argument. But modern physics has revived his idea. Many cosmologists assume our universe is just a time-space bubble in a cosmic superstructure, one of many fluctuations in a supervacuum which appear and disappear spontaneously like virtual particles. Each of these bubbles has different characteristics, its own natural laws, natural constants, its own history. It's as if the cosmos were trying out all possible ways of constructing a universe. Thus it's possible that universes could arise which give the impression they're older than they really are. Perhaps our universe is just five minutes instead of thirteen billion years old and all the clues pointing to a past, from the expanding universe to our own memories and experiences, are merely a random configuration. I'm not making this up – some cosmologists have put it forward seriously. Gosse's theory is simplicity itself compared to them, eh?'

Konrad repressed a sigh. With one eye he squinted at his second monitor and shuddered at the long list of demands that had collected in his e-commerce mail box: information services, web magazines, mobilcom providers, all complaining about direct debits that had been refused. One email he had just opened tried to lighten its unambiguous warning with a playful animation, a waving hand, which looked to Konrad more like someone waving their fist.

'Was that my lesson for the day?'

Harold rolled his eyes. 'Why are you always so impatient, man? Why do you think I've just been fiddling with my keyboard? A little matter of 5,000 euros I've transferred to your account. That'll be enough for you to eat over the weekend, won't it?'

'If I lower my expectations a little.'

'Now get those little gray cells working. I'm not doing this for fun, you know. I'm going to explain something that'll be a lot more use to you than those few bucks. Right then, listen up, this is the important bit. If it is the case that the universe, with all its observed characteristics, is simply the result of a spontaneous process – and, from a purely logical point of view, that cannot be excluded – then the laws of nature, which we derive from regularities we have observed, are simply an illusion. Let's assume the universe – and us along with it – came into being only five minutes ago. On the basis of the characteristics this universe assumed spontaneously, we imagine that mankind has been investigating regular occurrences in nature for centuries. And in the next five minutes, or five years or whatever, we are going to discover that the cosmos doesn't give a shit for our laws of nature. The fluctuation we call the universe is not stable. The natural constants vary, the laws of gravity don't operate any more, the moon is hurtling towards the earth. In a few weeks things are going to get pretty uncomfortable. Just think about it – and you'll have an explanation for the odd things you told me beforehand.'

Harold was notorious for his extravagant flights of intellectual fantasy. Usually It was something perfectly ordinary he was getting at, but he could get hopping mad if people did not

pay attention while he meandered through half the Western intellectual tradition.

'You cannot be serious,' Konrad said. 'What have a shopping mall in Shanghai, a dam collapsing in the Indus valley and a statistics office on Wall Street —'

Harold waved his hands about as if trying to ward off a swarm of flies. 'I've no idea,' he said. 'Do you think I seriously believe all the shit I've just told you? I'm getting worried about you, man. I've just had a look on your server. No new article for weeks. And the stuff before that — as boring as the rubbish you're wasting your time on now. Look at the take-up. Who buys your stuff? Only third class webzines that can't get anything else. What's to become of you? Should we all start sending you food parcels?'

'So what do you think I should do?'

'Get your brain working. Use your imagination. Make interesting connections. If I can do it, then surely you can. Isn't that why you became a writer in the first place? Bold speculation, crazy theories, hogwash at the highest intellectual level. In no time at all you'll be leading the pack.'

'I vaguely remember a certain supervisor who came down like a ton of bricks on the slightest speculative digression.'

'That same supervisor would have told you the exact opposite if he'd been training you to become a hack. I'm not God, I'm just the kick up your ass.' He clasped his hands behind his head, took a deep breath and gave a sigh of relief. It sounded as if he'd just made a great effort, but also really enjoyed it. 'So, do we go for it?'

'Can I have lunch first?'

'For all I care you can blow the whole 5,000 euros on whores, if it helps. But just remember — from now on I'm keeping an eye on you. I'm giving you an ultimatum, a deadline: if you haven't produced something by then, you can see how you manage on your own.'

Let's hope that's just another joke, Konrad thought. 'By when?'

'Twenty years from now. By then I'll have had enough. So back to the keyboard, my son.'

'I'll start right away. We'll see each other at the end of the month.'

'Of course.'

Sylvia was already waiting on the other line. Oh great, thought Konrad, it's open house today. Come on, everyone have a go at me, it's just what I need. He saw a taut pair of scantily clad female buttocks cross the screen and the old philanderer break into a broad smile, as if he had just had a great idea what to do with the rest of his day. Then the picture faded into a shot of Sylvia's living room. She was sitting on the sofa wearing leggings, her knees drawn up, her hair done casually, a green phosphorescent drink in her hand. Today everyone gave the impression they'd started their summer vacation early. Only he was sitting, uptight and lethargic, in the smokey corner of the office he shared with twelve other freelancers, without even the energy to switch off the machines, go home and get plastered.

'Is it my agent calling or my girlfriend?' he asked.

'Which would you prefer?' she said.

'A groupie. I wouldn't say no to someone squealing and screaming and tearing her clothes off.'

'Give me a good reason.'

'Such as?'

'You know I go for clever men. Intelligence turns me on. Another piece of brilliant prose from your pen and I won't be able to stop myself. Just imagine, live on the videostream, for lovers to download. But unfortunately ... '

It wasn't a good sign that at that moment the thought of a striptease, which she'd actually done for him once or twice, left him fairly cold. It wasn't her fault. She was still the same Sylvia, a tall, powerful woman who called a spade a spade and had a preference for men who were a little afraid of her.

'So it's business?'

'You were determined to have me as your agent, so why complain when I'm just doing my job?'

'OK then, as of now you're on leave of absence. And as your boss I order you to put on your skimpiest bikini and go and sunbathe in the roof garden. I'll watch you on the webcam.'

'Why not – except that just now you're not my boss, you're a walking disaster.' Her expression became serious. 'Three weeks ago you said you were working on several hot stories and needed a little time. OK, no problem. But I have the feeling you've been wasting your time again.'

'Rubbish. They're coming along well. Just a few more days.'

'Lies and more lies. Who did you spend all that time chatting to just now?'

'No one you know.'

She snorted, as if she were talking to a naughty child. 'D'you think I'm stupid? How much did you hit Harold for this time?'

'Business secret.'

'And obviously I've nothing to do with your business, I can see that.' For a moment she bit her lower lip. 'Come on, out with it. If you've been sitting on your butt for three weeks I can live with that. But don't try and tell me you're following up some sensational stories.'

'No, I wasn't lying. They're interesting, really. It's just that ... Somehow I've got stuck. There's something fishy going on, perhaps there's even a connection between the stories. I just can't find out what ...'

'OK then, let's go through the things together and then we can decide what's to be done. Perhaps I can help you.'

Sylvia had a glittering career as editor with all sorts of different web and print journals behind her and as a late starter had reached astonishing heights in scientific journalism. And it wasn't only in professional matters that she showed him the way. Since they had met two years previously, he couldn't make up his mind how their relationship should develop in the long term, but that didn't bother her, no more than the fact that he occasionally took refuge from her imposing presence in less problematic little affairs.

'You've probably already heard about the project in Shanghai,' he said. 'It was meant to be an exemplary joint venture between that way-out American architect, Waters from Chicago, and the Mei Ling Software Corp., which develops VR environments and expert systems for architects. You know the

kind of thing: intensification of US-Chinese economic relations, exchange of know-how, test runs for the markets of tomorrow, blah, blah, blah. The important factor for the Yanks was that the Chinese had promised long-term cooperation with juicy investment if a prestigious building could attract new contractors to undertake large-scale projects. So they needed something spectacular and there Waters was in his element. Perhaps you recall the business mile he put up in Teheran when American firms took over the place after the war. The whole of the industry's jealous because no one's yet been able to work out how he gets his buildings to stay up. Personally I don't like them, to me they just look like crooked scaffolding. But it is fascinating how he manages to hang the whole of the floor space in a structure consisting of a few twisted steel and concrete supports.'

'Didn't they flatten half a kilometer of buildings for him along the Huang-p'u?'

'That's exactly what I'm talking about. The Chinese thought the English colonial buildings had been a blot on the landscape for far too long and it was time for something a bit more hip. Waters put a gigantic suspended roof over the whole complex, eighty meters high and spanning almost twelve hectares. It looks like a seashell and under it the shopping arcades are arranged all higgledy-piggledy over each other so that you wonder how the whole thing's going to hold together.'

Sylvia shook her head. 'Why're you bothering with this? There were reports about it everywhere last year. As long as the thing doesn't collapse no one's interested.'

Konrad gave a knowing grin, though to go by Sylvia's reaction, not a very convincing one. 'Just imagine, I have clear indications that is exactly what's going to happen. This time Waters has gone too far with his experimental structures, the whole shopping mall's slowly tilting towards good old Mother Earth. Another two months and there'll be a big bang and that'll be it. Since Waters drew up the plans using Mei Ling's software systems – naturally – at the beginning they each tried to put the blame on the other, but since then they've got together and ganged up on the hardware suppliers, Hewlett-

Packard. H-P didn't want a compensation claim going into billions hanging over their heads, so they sent a team of programmers to Shanghai and demanded access to Mei Ling's source code in order to compile and test out the software on several independent systems. The poor bastard who's responsible for the series of tests must be close to a nervous breakdown by now. No serious bugs were found, neither in the hardware nor in the software, but despite that, every simulation produced different results. Sometimes it looked as if Waters's calculations were correct, sometimes as if the whole thing should have collapsed during construction. And at others it was different again. A genuine mystery. No one knows what's going on.'

'Apart from you?'

'No, I haven't the slightest idea either. That's my problem. But I'll —'

Sylvia broke in. 'That's enough, lover boy.' He could tell she had to make an effort not to bawl him out. 'That's exactly what I thought. I know you through and through, darling, you always go for this kind of thing when you feel under stress. You don't want get any further with it. You just want to crawl away and hide.'

'What is it you're getting at?'

'An investigative journalist who's got nothing to investigate. Are the other things just as flimsy?'

'What do you mean, flimsy? There's a similar disaster threatening a dam on the Indus. Two million tons of reinforced concrete are being junked. Is that flimsy?'

'And you don't know why there either?'

'No. Nor do I know what's hit these consultant guys on Wall Street. For ten years they've been raking in the millions with computerized exchange rate forecasts. In the last few weeks it's all gone haywire. They can't even get consistent results with last year's figures.'

'And you expect me to get excited about that?'

'Listen.' She was capable of driving him mad and had no scruples about doing so if she felt it was necessary. 'In each of these cases it was an established system that had been used

successfully for years. Then suddenly, out of the blue, for no apparent reason, the whole caboodle goes haywire. If there isn't a story in that ...'

'Get a grip on yourself, Konrad,' Sylvia said. 'That kind of thing's happening all the time. We're living in a world where Microsoft has raked in billions. At least half of all large-scale software projects come to nothing. It only takes an update and with any luck the whole shebang crashes.'

'That's not the same.'

'If you say so.' She spoke in placatory tones – which was not necessarily a good sign. 'Look, why don't you concentrate on ordinary, boring scientific journalism for a while? Professor X of the University of Y has been awarded this year's Nobel Prize for medicine for the discovery of a sure-fire cure for bad breath and sweaty feet. Professor A of the University of B has solved one of the great mysteries afflicting mankind by discovering why one sock and one sock alone always disappears in the wash. That kind of stuff. That story you uncovered about the schoolkids infected with hepatitis was a real cracker, true, but you're not going to find one of those every day.'

Keep calm, keep calm, Konrad told himself. 'We'll see,' he murmured, but so quietly he could hardly hear it himself.

'How about going out for a meal?'

'Oh dear! What's coming? Six of the best?'

'No. I just want to have a nice evening with you. And afterwards I'll take you to my bedroom where I guarantee I'll send you somewhere you can hear the angels sing.'

'I think I can just about manage that. Where?'

'You know where. I'll see you in two hours' time. And put some decent clothes on or I'll get really angry.'

Sylvia had a – to me disagreeable – preference for the temples of consumerism which Asiatic investors had put up along the banks of the Rhine between Duesseldorf and Bonn in the twenties, when several cities there had been amalgamated to form the new supercity. Her favorite was the Sherrington Mall in Kaiserswerth, an incredibly grandiose structure of steel and glass boldly plonked down in the middle of the landscape. It

looked as if its design had been taken directly from the covers of old American science fiction magazines. On the first floor there were so many expensive boutiques and kitschy gift shops one could easily blow a million in one afternoon without having to hire a truck to get home. Above them were thousands of empty hotel rooms waiting for the tourists the Rhine megapolis had not yet managed to attract. On the roof terraces a handful of fancy restaurants shared the most expensive floor space in the city, a fact which was reflected in the prices if not the quality. The bland designer dishes, which were presented as international cuisine, would have had any half-decent Chinese, Turkish or Pakistani cook tearing his hair. The Italian pop muzak complemented the cooking perfectly, but the view of the Rhine was something special, particularly at twilight, when the effluents from the chemical industry took on a striking glow. And all this enjoyed in the company of the most empty-headed of the nouveau riche riffraff to be found within a radius of fifty kilometers.

Normally Sylvia had no time for ostentatious show, but she wasn't averse to squeezing into one of her sequinned rags now and then in order to amuse herself at the mindless flaunting of an excess of disposable income. Konrad had given his velvet jacket a good brushing and rummaged round in the pile of clothes in his wardrobe until he found some things which didn't look too shabby, at the same time practicing a cool expression in the mirror so that he wouldn't look as if he was going to be sick any moment during the meal. As he passed through the mirrored vestibule into the Diner's Club Special, he realized that the three-day beard he'd insisted on not shaving made him look scruffy rather than rakish, and his outfit, instead of being stylishly black, was more like that of a third-class mortician. Still, Sylvia seemed to recognize that he'd made an effort. She said nothing when he found her at a half-hidden table in one of the galleries, just beamed as he planted a kiss on her cheek and waved the waiter over.

'I've a surprise for you,' she said.

Her dress had been tailored for a slimmer figure. Konrad couldn't take his eyes of her décolleté as he made a meal of

pulling out a chair and sitting down. The bodice was stretched tight and at every breath it looked as if her ample bosom was going to burst through the material.

'What? Are you wearing black underwear?'

She gave a faint smile, as if an adolescent had made a joke. 'I'm not wearing any underwear at all, lover boy, but that's not the surprise.' She pushed a caddy over to him with a mini DVD in it. 'There. That'll keep you busy for the next few months.'

A slightly built, dark-skinned waiter with the sultry charm of a metrosexual came over and pulled out a notepad expectantly.

'Tell me, what are those little things we had last time called?' Sylvia asked. 'Those cheese and vegetable balls with rice. Indian, you know ...'

'Oh no,' Konrad groaned, earning him an aggrieved glance from the waiter.

'Kofta. Malai kofta. But —'

'Malai kofta for two. And whatever drink goes with it,' Sylvia said to the waiter, laughing when she saw the pained expression on Konrad's face. The waiter hurried on to the next table. 'What have I done to my little darling now. Tell me, perhaps I might mend my ways eventually.'

'You know very well that the idiots here can't make kofta. Indian cooking's a special art. If you insist on throwing your money away ...'

'Don't waste your breath, Konrad. You get worked up about such a trifle, yet when your own livelihood's on the line, you putter along like someone who's no idea what's in store for them.'

'What's all this about?'

'I just wanted to see if you'd any juice left in you. If you can still get worked up about something. Seems you can, all that remains to do now is to direct that energy in the right direction.'

He picked up the minidisk. 'What's this?'

Sylvia raised her eyebrows. 'SLHC. Need I say more?'

'What?' At first he was just puzzled, but then he had a sinking feeling. The Super Large Hadron Collider, a huge linear particle accelerator that had been installed at one of the L5 points

between the earth and the moon, had been in operation for eighteen months and had sent the scientific illiterates of web TV and the press desperately seeing who could produce the most stupid headline. Konrad recalled things like 'There at the Moment of Creation' and 'Revealing God's Plan'. One press officer had declared in all seriousness that in a hundred years' time the scientists involved in the project would perhaps be seen as the founders of a new religion, having succeeded in reconciling science and faith. All that nonsense had put him off the project altogether and, anyway, he wasn't really interested in whether there was experimental proof of some of the main predictions of the superstring theory, as was claimed after the results of the first experiments had been analyzed. 'You're not expecting me to ...'

'Oh yes I am,' Sylvia said. 'I know what you think of all the carry-on, but that's not what this is about. The sensationalist media will soon find other things to write about and that means the time will be ripe for some serious journalism. Everything my informants have been able to find out has been burnt onto that disk. The material's incredibly complex, enough for years of solid interpretative work and commentaries. At present there's intense discussion among specialists in the field about the significance of the results. You could do some great speculative articles, duly circumspect, of course. I've asked around. We could sell them right away.'

'No.'

'What do you mean, no?'

'I'm not doing it. Others can waste their time on that shit for all I care.'

'You're off your head.'

'Could be.'

'You're behaving like a little child. What's the point? Do you think it'll harm your reputation if, just for once, you deal with a subject that's the teensiest bit topical or popular?'

Konrad's PDA beeped. 'It's still my decision,' he said, taking the PDA out of his jacket pocket. 'If you don't like it you can always chuck the job up.'

'There we go again.'

'What?' Konrad tapped the display where the arrival of an email from a certain Seth Wachowski was indicated. He had to think for a moment, then he remembered it was one of the software specialists Hewlett-Packard had sent to Shanghai. A friend with contacts in the American computer industry had tipped him off that after his work at Mei Ling he had been in dispute with H-P and had left the company. Since then he'd been going back- and forwards between the US and Europe looking for a suitable job, so far without success; he might well be willing to supply inside information for a good share of any fee. Konrad had given up hope of hearing from him.

'You always want to be ahead of the pack,' Sylvia said. 'Moreover you want to enjoy the feeling that you're superior to the rest and that you're despised for your superiority into the bargain. You're terrified you might be genuinely successful at some point.'

'What a load of shit,' he growled. Wachowski said:

I'll be in Germany for a few days. If you're still interested come to Frankfurt/Main between Saturday the 9th and Monday the 11th. You'll get the address there. Just between ourselves for the moment, OK?

SW

His heart missed a beat. He put the PDA in his pocket and stood up. Sylvia watched him calmly. 'What was that?' she asked.

'None of your business.'

'Sit down. We haven't finished.'

'I have,' he replied, but even that did not wipe the smug expression of self-control off her face. It was the way she always looked when she had decided to reprimand him like a rebellious teenager. There was nothing he hated more about her.

'You're seriously going to let go the chance of a fuck with me just because you feel a bit pressurized? Now I really do believe we've got a problem. Come on, sit back down.'

A good argument, as a glance at her décolleté showed. If the slackness he felt hadn't extended below the waistline, it

might have won the day. But at the moment he had other things on his mind than her black or non-existent underwear.

The waiter came with their drinks and looked uncertainly from one to the other. 'Have a good time,' said Konrad, 'but not at my expense.'

It didn't seem particularly to win her respect. She smiled, as if it was merely interesting to see that he could react in a different manner for a change. A touch of spice in the clear hierarchy of their relationship.

'Come crawling within three days,' she said, 'or I'll be seriously worried.'

He muttered something incomprehensible. Before he finally left, he wiped over the table with one hand in order to pick up the mini disk unobtrusively. Sylvia winked to make it clear she'd noticed.

A few months previously Konrad had moved his office out of his apartment in order to draw a clearer line between his work and his private life, not that it had brought any notable improvement. His brain always found something to carry round and — especially when, like your average moron, he was trying to relax with a beer or a film — turn over and over in his mind. Determined to keep his annoyance with Sylvia on the boil for a while, he went through the Sherrington bars, tossing back shorts, then took an expensive Beaujolais for a walk along the Rhine, before getting driven home by a taxi driver who deafened him with arias from Italian operas from a 400-watt car stereo system ('Great, isn't it?'). In a fit of alcohol-fueled self-assertion he promised a bartender he'd give his 'old woman' a kick up the backside she'd remember for the rest of her life, but the decision lasted less than two vodka Martinis. When he finally dropped into bed, too tired to get undressed, other things had taken over from his personal troubles once more and he spent a long time half asleep pondering the rumors going round since Wachowski had left Hewlett-Packard.

The guy was only twenty-two and had the reputation of being an eccentric child prodigy, one of those mathematical geniuses who at twelve can do the most complicated calculations

to twenty decimal places in their heads, but are happy if they've learnt to do up their own shoelaces and wipe their own asses by the time they're thirty. Millions of Internet users could thank him for devising new data-mining algorithms which opened the way to a flood of even more sophisticated spam tailored to our most intimate desires, but fortunately for him his name was only known to a few insiders. Even when he was at Berkeley it had become obvious he was hopeless at anything apart from juggling with systems of equations and Java source code, so Hewlett-Packard had set up a dedicated support team that saw to anything, in both his private and professional life, that might divert him in the least from the esoteric realms of system programming. It didn't make him particularly popular and former colleagues spread spiteful reports that he didn't even have to get his own clean underwear out of the drawer and that a girl was sent to the office once a week to make sure he evacuated his bowels; to save time she gave him a blow job while she was at it.

There must be a very good reason why a person like that, for whom nothing was more important than being able to play around with the latest and most expensive hardware, should suddenly have rejected such all-encompassing, almost maternal care which could have supplied his needs for years to come. On the net were minutes of a meeting with the senior management at which Wachowski dropped veiled hints that the irregularities at Mei Ling had not been caused by failures in either hardware or software but by some much more far-reaching phenomenon. Within certain clearly defined limits Wachowski had license to go off at any tangent he liked, but this time he had gone a bit too far. Since none of them had the faintest idea what he found so extremely disturbing, he had had the presumption to call those running the firm 'clueless idiots'. Konrad was very keen to make the personal acquaintance of this man, though despite his little rebellion against Sylvia, he still didn't feel he was in full control of his decisions.

At five the next morning, when his stomach woke him with the first signs of nausea, Konrad found he'd rolled up the bed-

clothes and was clasping them tight, like a sad imitation of a lover. Suddenly he regretted having missed out on the opportunity to wake up with his hand on the ample curve of Sylvia's buttocks. He stuck a finger down his throat, sat down at the workstation in the living room and slid the mini DVD into the drive. Sylvia had few scruples when it came to getting information which could give him an advance on other journalists; the stuff her hacker friends had lifted off the servers in the L5 research station could have got them several years in prison. The only problem was that she tended to overestimate the extent of his knowledge; it would take months for him to bring his particle physics and quantum cosmology up to date, at least to the point where he could make something of the photographs from the cloud chamber and the mass of data from the first particle collisions.

Among the publicly available material was a 3D animation which had been put together from the pictures of several camera probes and which, accompanied by pompous background music, simulated a journey at breakneck speed to the head of the 140-kilometer-long particle accelerator. Against the background of the western hemisphere of the moon, superconducting magnetic coils the size of houses – like an endless chain of chunky jewelry – shot past, only just missing the onlooker's head. Between the moon and the tail-end of a recently discovered comet, the vacuum tube narrowed to a point from which – as the camera slowly decelerated – the star-shaped complex of the Feynman Station emerged. The narrator, who spoke in the gushing tones of a gossip columnist, talked of the biggest non-architectural structure created by man and stressed ad nauseam the historical importance of December 21 2036. That was the day when, after a construction period of eight years and a scandal-ridden budget overshoot of billions, the physicists put on the greatest show in the history of science. A hand-picked hundred-strong contingent of journalists from all over the world had been transported to the station at exorbitant cost to report on an event that was completely incomprehensible to the layman. All that even Konrad knew was that protons were accelerated almost to the speed

of light and shot at highly compressed plasma with an energy which corresponded to conditions in the cosmos only a few milliseconds after the big bang. For the first time they had reached an area in which the four basic forces of nature combined to make a single unified force — the moment of truth for all versions of a theory of everything.

New for Konrad was the fact that the SLHC even had a few giga-electron volts to spare, allowing it to bring the physical conditions it could be used to investigate to within an infinitesimal distance of the moment of the big bang. This was the area where experiments conducted two months later had seriously dampened the scientists' enthusiasm, though naturally they did not go to the same lengths to blazon that abroad. When they ventured onto levels beyond the union of energy, the scientists, who regarded themselves as participants in the final culmination of physics, were suddenly confronted with a chaos of new, exotic elementary particles which threatened to turn the established order of baryons, hadrons and quarks upside down.

The records of this second series of experiments were completely incomprehensible to the non-specialist, but Konrad found a reflective commentary by one of the quantum physicists on the advisory board which could perhaps be the basis for an interesting article. The author reminded his colleagues that particle accelerators were like microscopes with which they zoomed in on ever more minuscule areas of space and time. However, space and time were not divisible ad infinitum and from a certain point onward would themselves begin to show quantized behavior. At an interval of 10⁻⁴⁵ seconds or less from the big bang, one was in the area of Planck time in which the usual temporal and causal conditions no longer operated. On such a scale it was no longer possible to say in what order two events took place nor whether two particles were in the same or different places. That, he concluded, presumably explained the odd measurements in February.

Sylvia was right, the material contained all sorts of ideas he could use, with a certain amount of hard work, to put together some interesting, even serious articles. He was tempted to call her and apologize, but there was something inside him that

balked at once again behaving like the wimp he was. He mulled things over then, without giving himself time to change his mind, sent Wachowski an email to say he'd see him on Saturday and booked a flight to Frankfurt online. After that his sleep was even more disturbed.

Two days later he was sitting in the foyer of a little guest house in the middle of Frankfurt, sipping a coffee which would have sent anyone with a heart condition straight into intensive care and resisting the temptation to listen to Sylvia's voice-mails. He wondered why a man like Wachowski was staying in a scruffy, family-run place like this, a 12-room hovel with dusty eco-freak decor run by a couple who looked as if they were left over from the hippie revival of the twenties. The man at reception with graying frizzy hair who downed a schnapps every fifteen minutes had seemed very surprised that a visitor had asked for Dr Wachowski and was still casting curious glances at him.

Wachowski kept Konrad waiting almost an hour. When, finally, he got out of a taxi, a notebook under his arm and carrying a leather briefcase, Konrad didn't recognize him at first. His photo on the Hewlett-Packard websites showed a chubby-cheeked boy with soft, rather immature features and wavy hair. Since then he had clearly lost weight, was almost gaunt and going thin on top, carelessly dressed, jerky and awkward. When the man at reception pointed to Konrad, he scarcely reacted and as he approached, Konrad noticed a glassy dullness about his eyes which he recalled from his own experiments with stimulants.

'Are you Tankert?' Wachowski asked, giving him a brief handshake. 'Follow me, we haven't much time.'

Besides a double room he had also rented the rooms either side. When he held the door open for him Konrad gasped. On the bed, the table and the two bedside tables were at least two dozen PDAs, scientific calculators and other mini computers, piled up higgledy-piggledy. Wachowski dumped his PDA on the pillow, stood the briefcase on the bed and took out further pieces of equipment, which he stacked in no particular order on the wardrobe shelf.

'Sit down if you can find somewhere.'

Konrad cleared a chair and watched as Wachowski rummaged around in a drawer and an open suitcase. He only calmed down when he found a packet of marihuettes. He lit one and laughed at Konrad's look of astonishment.

'Before we start,' he said, 'please spare me the usual shit I get from journalists, you know, what's wrong with me, what happened at Hewlett-Packard and so on. I know I'm not at my best at the moment. But that's not why you're here.'

'Why ever else? Weren't we going to talk about Waters' project in Shanghai?'

'What's the point? You know everything about it. What you don't know is what's behind it. I've been looking into it for months and it's time I talked to someone about it.' He sat down at the foot of the bed with a glance at the machines on the bed beside him that was almost fearful. 'Before I go out of my mind.'

Konrad couldn't tell whether there was something psychotic about Wachowski or whether it was just the strain. He said nothing, just waited till he'd taken a few drags on his marihuette and went on unprompted.

'Tell me, do you believe in anything?'

'You mean in a religious sense?' Konrad asked.

'Not necessarily. In more general terms. For example as a scientist. Even a scientist has to believe in something. Or to assume as given.'

'In laws of nature? In material reality? The possibility of rational understanding?'

'Yeah, that kind of thing. Now just imagine that something basic, something so fundamental to your view of the world that you seldom think about it consciously, is suddenly put in doubt. For example you're a doctor and you come across a virgin birth in a human being. Or you're a physicist and you witness teleportation. Something that's completely absurd, impossible, and still happened.'

'I'm trying to imagine it. And?'

'Then you'll know more or less how I feel at this moment.' He stared into space and his face muscles twitched nervously.

'I've always regarded mathematics as something that is absolutely clear. No ambivalence, no fuzziness as there is in the material world. Axioms, proofs — something is true or not true. A handful of elementary principles which structure a world of pure logic. The highest achievement of the human mind. And there I am, working away, when I suddenly see an elementary principle is no longer in force. Simply no longer valid. As if everything I've done in my life's turned out to be an illusion.'

'Just a minute, if you —'

'Okay, okay. I'll try to put it in a way an outsider can understand.' He picked up a PDA, on the display of which Konrad recognized the toolbar of an algebra package, played with the trackball for a while, then put it down again.

'Let's just call it the principle of complementarity. For every mathematical operation there is an inverse operation, which we normally just use to check that the calculation was correct. Say we multiply 12 by 7. The result is 84, and when you divide 84 by 7, you expect the result to be 12. 84 divided by 7 is another way of expressing the number 12. The whole of mathematics is based on the ability to transform these expressions into each other consistently and in both directions. Now imagine that in an operation you come to a result that contradicts the result of the inverse operation. 12 times 7 is 84, but 84 divided by 7 is suddenly 13. You follow me?'

'In that case I would assume that I was either poor at mental arithmetic or my computer had a glitch.'

'That was what I initially assumed. Of course, it wasn't such trivial calculations I was dealing with. The inconsistency I came across was in a system of equations several with hundred derivatives. I spent months analyzing a subroutine in Mei Ling's software which seemed dubious to me. Eight hundred lines of incredibly dense C++ source code, any number of opportunities for program loops to end up biting their own tails. In it was a small variable which, after a complementary inverse calculation with over two hundred steps, took on a value other than it should have. The crazy thing was that the deviation varied. It was impossible to reproduce the error. Naturally I assumed there was a bug, but after eight weeks of tedious de-

bugging sessions it still looked as if the routine was completely clean.'

'And the solution?'

'There is no solution. I had a look at the algorithm and worked through the system of equations independently of its implementation. With the same result. I wrote the routine in other languages. Eventually I even did the calculations with pencil and paper. Each time the same. A deviation that varied within a certain interval. Completely inexplicable. I had come across something that went against the most simple and elementary law: the axiom of identity, x is x . Here it was suddenly x is not x .' Konrad's expression was probably over-skeptical, for he went on, in even more agitated tones, 'I know just what you're thinking. In a case like this anyone would presume my brilliant mathematical mind is on the blink. Do you think I would be telling you all this if I hadn't already checked out every possible doubt about myself? I'm not crazy. This discrepancy, this discontinuity does exist. You can take the material with you, if you like, and do some of the calculations.'

'What did your colleagues say about it?'

'So far I've kept it to myself. First of all I wanted to be clear about what I was dealing with. This isn't everything, you see. When, after three months, it was clear we weren't getting anywhere at Mei Ling, I flew home on leave to Ohio. I switched off for a few days then worked through the whole thing again, hoping I'd missed something because of the stress. Not a sausage. The deviations appeared at home as well, only within a narrower range. Can you imagine? I went through the same calculations in the same way as in China, in my head and with only a biro and a sheet of paper. And again the results were different.'

'And here? I presume that's why you have all the equipment with you, isn't it?'

'Why do you think I've spent the last eight months going here, there and everywhere? I've come to the conclusion it must be something physical. I've discovered further inconsistencies in complex systems of equations, which vary with time and geographical location. It is clear that there are zones where the de-

viations vary in differing degrees. I've been to Europe and back several times, but have been unable to reproduce the geographical distribution. Then it occurred to me that the earth revolves round the sun and the sun round the center of the galaxy. Perhaps it's nothing to do with one's location on the surface of the earth, but with one's location in space-time.'

'What's all this supposed to mean?' Konrad was starting to feel uncomfortable. Wachowski's behavior had taken on something of the fanatic. He was sweating profusely and his eyes were watering.

'I've no idea,' Wachowski said. 'There's a saying that the book of nature is written in the language of mathematics. Whole generations of philosophers have racked their brains about the relationship between mathematics and the world. Perhaps mathematics is not a realm of ideal objects after all, but firmly yoked to material reality so that when that changes, mathematics changes too. Something must have happened to change the structure of reality. I don't know what, but I think I know when.'

He went over to the desk, opened a laptop and showed Konrad the screen. Konrad recognized an exponential curve with a swarm of colored dots grouped round it. It looked more or less like a horn of plenty opening out along the horizontal time axis.

'That's only a crude statistical analysis,' Wachowski explained, 'but you can see that the effect has been getting stronger and stronger over the last few months. At the moment the deviations are in the range of a few thousandths which, if we really are talking about the effects of a physical phenomenon, would correspond to events on a submicroscopic scale. I don't know much about physics, but if such phenomena occur everywhere, they could very quickly add up to macroscopic effects. Moreover the change is progressing at ever increasing speed. Soon mathematics as we know it will no longer exist. But things get even more interesting if we look in the opposite direction.'

He pointed to where the curve was a broken line which cut the time axis a few inches before the first colored dots. 'I've

only been observing the phenomenon since October, so my database is not sufficient for a precise extrapolation, but if you ask me, I would say that this began somewhere between January 20 and March 5 2037. You know what's going on in lots of areas, so I'm asking you: what happened during that time — on earth, in the cosmos or wherever? Has anything unusual been observed? What can it have been?

Something did occur to Konrad, but it seemed just too absurd. 'I ... I've no idea.'

'Whatever it is,' said Wachowski, closing the laptop, 'it's got me shit-scared. Do you get me? You could be standing in front of me with a machine gun and I'd just laugh. This thing here's of a quite different order of magnitude. We may even be talking about the end of the world ...'

He dropped his half-smoked marihuette onto the floor, crushed it with his foot like an annoying insect and stomped across the jumble of rubbish and clothes to the bathroom. 'Now go,' he said over his shoulder. 'If you don't believe me, forget the whole thing. If you do, take the CD on the bedside table and do some more research. I can't be the only one who's noticed something.'

Once he was out of the guest house the whole conversation seemed unreal to Konrad. It left him feeling somehow dissatisfied, as if he hadn't paid enough attention, as if he'd missed something that would have made it easier for him to dismiss Wachowski as either crazy or a fraud. During the flight his thoughts constantly revolved round February of the previous year. The pretty woman in the seat next to him drew him out of his ruminations with a few minutes of chat and he began to think he had perhaps taken Harold's advice too much to heart: make interesting connections. He decided to forget the young mathematician and to start on his SLHC articles straight away. Once he was back in his office, however, he had a look at the CD Wachowski had given him and went through the supposed inconsistencies himself.

He spent a whole twenty minutes with his calculator until tiredness got the better of him. When he had recovered and made sure he wasn't deluding himself, he went systematically

through the last sixteen months' issues of all the web magazines he subscribed to. It turned out to be the most horrendous three weeks of his life.

Harold celebrated his seventieth birthday in the foyer and main lecture theater of Frankfurt University, with old colleagues and rivals and the most successful of his ex-students from all over Europe. There seemed to be a competition between his contemporaries to see who could tell the most scabrous anecdote from the podium. Harold got hold of a microphone and interrupted after every second sentence to say it was a scandalous misrepresentation; things had been much worse than that. After a few solemn words about Harold's services to science, which no one could prevent the Dean from delivering and at which the recipient appeared amused rather than flattered, the horde fell on the sumptuous buffet and the wide selection of drinks. Harold seemed determined to prove he could still drink any of his age-group under the table and insisted, despite his hip trouble, on getting up for a dance with his secretary, a redhead who could really swing her hips.

He was in the middle of a boisterous conversation with some friends when he saw Konrad enter. He hadn't expected his favorite student to come dressed to the nines, but he was still shocked at his appearance. Konrad looked weary and drained, a six-foot bear of a man with the air of a shrunken old graybeard. Harold went over to him and drew him to one side before he could mingle with the guests.

'Hey, what's the matter with you?' he said, plucking at Konrad's leather vest. 'You look as if you've spent the last three days sleeping rough. Not exactly a compliment to your old supervisor.' He glanced round the foyer. 'Your sweetheart's floating round here somewhere. She's been pouring out her heart to me, something about you being incommunicado for weeks. She's desperate, poor thing.'

'Sylvia's not important just at the moment. It's imperative I talk to you.'

'Someone kicked you in the balls, or what? I wouldn't let a dish like that out of my sight for more than a few minutes. If

you don't want her, just say the word. I'll swallow a few pills and give her one myself.'

'Please, it's important. Are there some calculators anywhere here?'

'What ever for? Perhaps you haven't noticed, but we're having a bit of a party here.'

'Yes or no?'

Something about Konrad's voice made Harold prick up his ears. 'If we must. There's a seminar room over there we can go to.' He scrutinized Konrad's face. 'My God, you look all in.'

One hour later Harold was sitting between two terminals, a pile of paper covered in scribbles on the table in front of him. He was completely sober. He was looking from one monitor to the other, moving a mouse at random and writing, though with flagging enthusiasm, invisible symbols and figures in the air with a felt-tip. Music could be heard from the foyer and a head occasionally appeared round the door, only to be brusquely waved away by Harold.

'It's some kind of trick,' he said at last, slumping back into his chair and watching Konrad, who was pacing restlessly up and down the room. 'Come on, admit it. You're trying to put one over on me. For once in twenty years you want to see me speechless.'

'I wish that were the case,' said Konrad. 'If you can prove it's a trick, great, I'll be on my knees before you straight away, kissing your feet. I could give you another dozen examples from topology, combinatorics, graph theory etcetera which are equally absurd. And that's only the beginning.'

'What does all this mean, then?'

'All this means the world has gone crazy. For example there's that comet they haven't given a name yet which just missed the earth a year ago and which is moving through the solar system on a peculiarly spiral course. Astronomers are baffled because the thing appears to be ignoring the laws of celestial mechanics. But there's a quite simple solution. Just insert a time factor into the equations which influences gravity and they work out perfectly. That means its course can be explained if we assume the planets' gravitational pull is no longer constant.'

'Correct me if I'm wrong, but that's absolute ...'

'Wait a minute. I've got something else here.'

'Don't go off at another tangent. I don't see what the connection between all these things is yet.'

'It'll come. Something similar's affecting one of the little shepherd moons in Cassini's Division. The lump of rock has suddenly gone into a spin, threatening the stability of the ring system. Again astronomers are baffled — and again it can be explained if you assume a temporal gradient in Saturn's gravitational field.'

Harold just shook his head.

'And another thing: for the last six months American telecommunications firms have been plagued with chromatic dispersions in their fiber optic networks. That means that the semiconductor lasers don't produce clear emission peaks any more; instead of sharply separated frequency bands, they're getting a mishmash of wavelengths filling their cables. And again everything suggests a temporal process, this time in the quantum equations describing photon emissions.'

Harold waved his hands. 'Stop, stop, my mind's in a whirl. You make it sound like a conspiracy theory. Is there a point to all this? What are you driving at?'

'To put it briefly: scientists and technologists all over the world keep coming across greater or lesser inconsistencies which all suggest that constants in physical events have started to drift. Infinitesimally, without any clear pattern or common direction except that the drift is getting stronger all the time. And all the temporal gradients lead back to one day, February 18 2037.'

'Let's assume I believe you. What happened on that date? What's the connection between all these events?'

Konrad shrugged his shoulders. 'No idea. I had hoped you would come up with something. As far as I can see there's only one thing that happened on February 18 which could have anything to do with it. On that day, in a plasma bubble a thousandth of a millimeter in diameter, the Super Large Hadron Collider produced energy which is practically indistinguishable from conditions during the big bang. A mini big bang, so to speak.'

Harold switched off the machines and stood up. 'Let's go and join the others,' he said. 'Don't take it personally, but it's all too weird for me. I know what a brilliant mind you've got and usually one can rely absolutely on your results. But I also know you're eccentric and I'm just not sure you haven't gone down the same road as thousands of geniuses before you. I'm not going to come to any firm conclusion on this until we've discussed it with competent authorities.'

Konrad sat down on a desk. As Harold was about to open the door, he said, 'You've got me wrong. I haven't come to any conclusion yet. Perhaps I really have gone mad. I hope so, I really hope so. Because if there's any truth at all in the whole business, we can't just carry on as usual.'

'What were you hoping to get from me?'

'Nothing. An idea. An inspiration. However far-fetched. D'you remember what you were telling me about Adam's navel on the phone not long ago?'

Harold laughed, though it sounded more like gasping for breath. 'That was just a joke, Konrad. I was hoping it might provide some inspiration, I thought ...'

'I could do with some inspiration now.' Then after a pause. 'I'm really concerned. I don't know what to believe any more.'

'Okay,' said Harold. 'But first of all let's get out of here. I need some fresh air.' A few minutes later they were sitting with a 5-liter keg of beer at one of the tables the students had put out on the campus terrace. Harold was cradling his glass in his hands like a precious object and gazing reflectively into the twilight. Konrad saw Sylvia among the young people out on the grass below. She was walking round restlessly, exchanging a few words here and there, taking the occasional sip at her drink, more for the look of it than anything else. For the first time Konrad was convinced she really cared for him.

'I'm not saying I believe a word of all this,' said Harold, 'but let's indulge in a little speculation. Planck time's a good place to start. Do you remember what I said about the cosmic super-structure in which our universe might be embedded? This super-medium, in which universes arise out of nothing, is basically just one great big Planck refuge. In it there are no fixed

causal relationships, there's no temporal sequence. In it things can happen without a cause. One event can be caused by another which, from our perspective, happens later.'

'I don't quite follow you.'

'How did you put it? A mini big bang. Perhaps it wasn't a mini big bang, but the big bang. On February 18 the scientists of SLHC came so close to the moment of creation that it's impossible to say what was first, the particle accelerator or the universe in which it was constructed. Our universe has only been in existence for fifteen months. It was created on February 18 2037 in the course of an experiment in physics. Homo sapiens is a god after all. We've brought our own world into being out of nothing.'

Konrad screwed up his face. 'There's just one little flaw in the idea. Our universe must have been in existence already, otherwise there wouldn't have been anyone around to build and operate the SLHC.'

'Your mind is obviously still stuck in our miserable little causal world. It's sufficient that both events have taken place. On the one hand the birth of our universe, on the other the experiment with the SLHC. In Planck time it's sufficient that there is some relationship between the two events. One can have triggered off the other, but it can also be the other way round. An event within a universe can bring about – from our point of view retrospectively – the creation of that same universe. It's the bizarre behavior of the quantum world we're talking about here. '

'Pulling ourselves up out of nothing by our own bootstraps ...' Konrad belched and refilled his glass. 'Excuse me if I get drunk, but we should raise our glasses to the world – as long as it still exists. What's going to happen now? Will everything fall apart?'

'Another little error from my cleverest student.' Harold smiled and clinked glasses with Konrad. 'The world can't fall apart. There have never been any laws of nature telling it to behave in a different way from the way it happens to behave. Everything's drifting, floating along and will turn into something we cannot imagine. It's like Adam's navel. All those bil-

lions of years of the past were projected into the universe by our own instruments. I'm not an old man at all.'

Konrad gulped. 'We'll have a good laugh about all this rubbish tomorrow, won't we? I'll get pissed as a newt and when I wake up with a colossal hangover I won't understand how we came to think up such crazy nonsense.'

'But for this evening ...'

'Yes.'

Harold stretched out a hand. 'Look how beautiful she is.'

Sylvia was standing underneath a lamp. Against the light her figure stood out under her thin summer dress. She gave a visible sigh of relief when she saw Konrad up on the terrace. Her smile had a hint of desperation and she shook her head, as if she were amused by the sight of her friend beside his old mentor.'

'Let's try and take a positive approach,' Harold said. 'What difference does it make when and under what conditions our world came existence? Everything passes, whether in a million years or five minutes. Each one of us has only an infinitesimal fraction of eternity. And for that brief time the universe paired you up with that magnificent woman. Perhaps you ought to ...'

'Excuse me,' said Konrad.

He went straight down to her, embraced her and buried his face in her décolleté. 'I'm an idiot,' he muttered. 'I'm an asshole. I'm crazy. And I'm drunk.'

'What a convincing piece of self-analysis,' she said with that hint of sharpness in her voice, which suddenly sounded to him like an angel whispering in his ear. 'You're your old self again. It almost makes me go weak at the knees.'

'Let's go. I've a lot to make up for.'

'You seem to be in a hurry all at once?'

'What else? You never know how much time you have left.'

She tapped him on the back and he saw that she was looking at something in the sky. 'What is it?'

'A shooting star. You didn't see it? It was the third this evening. Odd. Why do you think that is?'

'You're going to see a lot more, believe me. A time of miracles is at hand.'

'If you say so ...'

Reconstructor

THORSTEN KÜPER

Translated by Michael K. Iwoleit



Thorsten Küper, also known under his Second Life alias Kueperpunk Korhonen, was born in Herne in 1969. He is a physicist, writer, blogger and citizen of virtual worlds. He has published stories about virtual reality, surveillance, media and technology in magazines such as c't, Gee, Exodus or Nova and various anthologies. He has also written numerous satiric short texts that he likes to perform live as well as articles about science, virtual reality and art, among others in Telepolis. Together with his wife

It may well be that I'm already on your tail. Right now. Of course you wouldn't notice, although I've already been following you for some days. Although I've studied your lifestyle habits and thoroughly searched your apartment. I already know all there is to know about your life. I know your habits, your strange needs, all the dirty little secrets, your neuroses, your phobias, your compulsions. I know you better than I know myself – but that's actually not so remarkable.

You may even see me one or two times, but your eyes would just pass over me. You would not consciously notice my presence. Mine is just one of millions of faces, one of these grimaces lacking any personality that you look straight through. Too pale, too nondescript, my facial features far too average, lacking something distinctive. I'm just like anybody. You wouldn't even perceive my eyes behind the mirrorshades.

So I would follow you for a couple of days while approaching you only two times.

The first time to take a sample. A used soft tissue, a Q-tip, a spat-out chewing gum or cigarette filter, cutlery that you have used. The second time I will be carrying a case.

It will definitely be too late for you then. An escape, however, would have been pointless from the outset.

You can't escape me, just as you can't run away from yourself. You never had the slightest chance. I've been doing this for much too long.

Justine descends into an underpass. I'm following her while projectors paint a blue sky with softly drifting clouds onto the semi-cylindrical tunnel walls. The clouds assemble into a cot-

ton wool-like string of characters, praising a psychiatric drug. It's one of the drugs that Justine consumes herself. One of the 14 compounds that she swallows each day. She flushes down most of them with strong red wine.

Today is the day when I carry the case. Only for her.

Justine won't escape me either.

You can see that she's in the advertising business. Expensive makeup, dark brown shoulder-length hair that she usually wears in a braid, but loose today. Shoes with high, I mean really high, heels pointed like needles. They make a noise like splinters of glass hitting the pavement.

I've been watching her for a few days straying through her ready-made, plastic life. Yes, there's a certain kind of structure, a fixed daily routine. She does her job in a responsible manner, performs her tasks like an automat. She seems calm, even at ease while developing meaningless marketing concepts.

But there's always a certain unrest as soon as she leaves her office. Sometimes she looks up and turns around as if she has heard someone calling her name. Sometimes she freezes and looks down as if she expects to find something revealing at her feet. And sometimes when she's facing her own reflection in a mirror she hesitates and stares as if she's recognizing this face as her own for the first time. As if she's having her first encounter with herself.

An unconscious reflex, some corner of her mind instinctively searching for itself, reaching for an insight, trying to fill gaps. In vain.

Most of them do it. It's a pattern of behavior that I've observed again and again. Including the obsession with appearances. Perfect styling, perfect makeup, expensive outfit, surgical adjustments, sometimes half a dozen within a few months. An almost pathological attempt to define one's self through outer appearance. The high price they pay for becoming an empty shell – since there's nothing left on the inside.

I've taken Justine's sample from the little tube that she puts into her nose to dust her mucosae with a white powder. Just a few epithelia have been sufficient. I've conducted the test with a portable scanner in my hotel room. It has identified her conclusively.

Kirsten Riehl aka Zauselina Rieko he is well-known for organizing literary events in the virtual world of Second Life. His first story collection Belichtungszeit was published in 2023 by the Cutting Edge imprint of InterNova's host publisher p.machinery.



Translator Michael K. Iwoleit was born in Düsseldorf in 1962 and lives in Wuppertal today. He was educated as a lab assistant and studied philosophy, sociology and German philology. Since 1989 he is a freelance writer, translator, editor and critic mostly in the science fiction field. Apart from his literary activities he has also worked as a copywriter for advertising and IT industry. He is the founder and editor of InterNova and was the co-founder and long-term fiction editor of its German sister magazine Nova.

She's the right one.

Pity? Do I feel pity for her? No, I don't think that I ever feel pity for them.

I just do what has to be done.

The guests are sent upwards in groups of about 40 people with a freight elevator that obviously has been installed afterwards. I've been waiting in line in front of the building for almost two hours. Less than 15 feet behind Justine, who has not looked a single time in my direction. Her flirt with an Arabic-looking man has lasted only a few minutes and ended when two other women showed up, who revealed themselves as his partners by exchanging intense tongue kisses with him. Justine ended the talk visibly annoyed and preferred to wait for the next elevator. It carries us up to the top floor of the old hospital. The case in my hand becomes heavier for a few seconds. My fellow passengers would be surprised by its contents.

The elevator car is made of shining metal and glass and seems to be brand-new. It's flooded with unobtrusive club sounds from hidden speakers, just loud enough to drown out the faint conversation of the guests. You can look into and out of the building through transparent walls. All floors of the building are in an unfinished state, without exception. Glassless windows gape like empty eyesockets. Pools of black rainwater have collected on the floor, reflecting the elevator car. There are not even stairs between the levels. A building project that has run out of money halfway. One of many.

This is not a permanent club. It will probably move to the next building tomorrow because this is not an official party. Meaning: no cameras.

Justine leans directly against the outward wall of the elevator, her palms on the pane. Her inert eyes contemplate the city – or her own mirror image. I see myself lean behind her and take care not to look at her reflection in the glass for too long. An unusually tall woman to the left of me with the wide, high cheekbones of an Asian is scrutinizing me. As I look at her directly, she turns away embarrassed. I have to correct my first impression. Her face... something is wrong about it. The nose is

too wide, the chin too vigorous. A ladyboy, almost seven feet tall. He tries again a few seconds later. His far too flamboyantly made-up features are distorted into the imitation of an uneasy smile. If he's waiting for a response, I have to disappoint him. Instead I turn around as the elevator stops and the pane behind me slides aside.

A surge of drum and bass sounds sweeps across us. I don't hear any voices. I only see moving mouths that emit no sound. My eyes take some time to adapt to the semidarkness that is cut by blue and green blades of light. Over the heads of the guests, giant tongues moisten rubbery lips

Devices project a kaleidoscope of female mouths onto the dome above. On heavy operating tables that are suspended by steel ropes from the ceiling, female dancers twist about with bound hands. Someone has spent a lot of money and hasn't got much more than cheap whorehouse aesthetics in return.

I begin to move, just slow enough for Justine to outpace me. She's actually squeezing past me in the flow of the new arrivals and thus makes it easy for me to keep on her tail. She's pushing swiftly and purposefully through the crowd. While heading for a particular spot, she pulls a mask out of her bag that hides her eyes, brow, and nose. Many hide their faces here. Especially the consumers of illegal substances.

Two minutes later Justine bargains with a huddled figure behind a workbench of sorts. The man's face is also covered by a mask. Unlike the masks of the other visitors, his is connected to an oxygen tank. A brawny, angular woman sits in front of a holographic display with her back towards him and Justine. The online version of the Financial Times hangs in front of her face. She looks over her shoulder now and then and at one point touches the shoulder of the man with the oxygen mask, a tender gesture that is at odds with the tattooed dagger on her arm.

The man has taken Justine's order by now and prepares the menu right here in plain view. The synthesizer on the table looks somewhat like the miniaturized model of an oil refinery. More than a hundred ampules, marked with colors and numbers, stick in the loading socket. None of the substances they

contain would be illegal by itself. That's not true of the product that will be formed in the reaction container in a few minutes. The small man and his assistant will simply break it into pieces and flush it down the toilet later. Nothing that he carries would justify an arrest. He stays clean – as long as he doesn't sell the wrong ampule to an undercover cop.

Justine spends a few minutes on the dance floor, standing rather than dancing. Alone.

She fetches her order fifteen minutes later, pays a significant sum in cash and cuts her way through the crowd. She declines the advances of two men with an energetic shake of her head. It seems that she's not in the mood for conversation. It's time for me to become active. If she'd ingest her freshly mixed cocktail before I approach her, it would be very unfavorable for my work. Justine and me have a date today. It's just that she doesn't suspect anything.

She walks through a short hallway and leaves it through a doorless exit. The drum and base storm decays out here and the air is cool tonight. That's why nobody else is tempted to come out.

Without the cover of the crowd I drop back somewhat and stick to the shadow of the canopy. Justine purposefully moves on to the edge of the roof. There are no barriers. There's no border between her and the abyss. Her footsteps even begin to accelerate. For a moment I'm sure that she will simply walk on. Over the edge, into the abyss. Fourteen storeys down to the concrete.

I'm sure she's considering it.

Both Justine and me know it's good that her life is going to end tonight.

But not like this. Not by her own hand.

I become aware of another hallway to the left of me, illuminated by a single lightbulb that hangs down from the ceiling on a power cable. A steel staircase behind it leads down to the lower floor.

There will be no better opportunity. So I start to move. Swift, but inaudible. I'm less than ten feet behind her as she notices me, shoots me an unperturbed glance over the shoulder and declares: „Forget it, I'm not in the mood, okay?“ Her legs

dangle over the edge of the roof as she says this. Fourteen storeys of a yawning void under her high heels. She still doesn't bother to look at me.

„I see," I reply. „But that's not why I'm here."

She instinctively pushes off as the needle bores into her shoulder. At the same time I pull her away from the edge of the roof with a hand under her arm. Even now she's no longer able to control her tongue. All that she utters is an incomprehensible babbling, not even loud.

I hear something moving behind us and spot silhouettes in the hallway. But Justine is just one of many drunk women in the arms of a man now. Nobody will be offended by a guy who takes a chance. They all would do the same.

I can't finish it up here. The neurotoxin neutralizes the motor control almost completely. The guy who sold me the stuff calls it „voodoo tea." I remember his spiteful, toothless grin and his rank, sweetish breath and how he told me: „Good thing is that she will still be able to move her tongue." While saying this he had scratched his backside. „Still good enough, if you know what I mean."

It acts rapidly, but its effect diminishes just as fast. That's important. I can't work as long as she's sedated.

Justine is so light and delicately built that I can drag her with me easily. It makes us look like a shattered couple. I don't even have to set down the case while I pull her down the stairs. Her heels make a screeching noise on the steps but it doesn't alarm anybody.

The corridor on the lower floor is almost completely dark. The light bulb has probably been installed to keep people from falling down here.

I can make out two doors on the left side and push the first one open. I'm faced with a number of other doors. Toilets. Equipped with locks.

„Whhhhaaaaaa ..." Justine just utters incoherent scraps of sound. The neurotoxin is suppressing more than 30,000 years of language evolution on the cortex.

I select a stall at the end of the row and push Justine down on her knees with my body weight, in such a way that her up-

per body is pressed onto the toilet seat. There's nothing she can do about it. She's mine.

It takes just a few minutes to prepare my operating room. I unstick the foil from the light strips on the back of the LEDs and attach them with the adhesive tapes to the side walls and the door. They bathe the stall in blazing white light. My own shadow performs a hectic shadow puppet theater on the back wall as I take the instruments from the case on my left. I can operate with them everywhere. In hotel rooms, in toilets, in the cabin of a capsule hotel, on the back seat of a car, in the cargo hold of an airplane.

"Whaaaaaat?" Justine has turned her head and gapes with horrified widened eyes at the arsenal of my instruments. Ampules, filled syringes, several scalpels, even a drill and a bone saw. Tools that I need now and then.

"MOOOOO." It's supposed to be a "No" but the failing muscles of her tongue don't manage it. She tries to rise with all her might. In vain. I'm much too heavy and powerful for that.

I have prepared the injections hours ago. The smaller one contains sodium lauryl sulfate and some admixtures. This cocktail will raise the permeability of the blood-brain barrier. The second syringe is somewhat larger. You would think that it contains an ordinary saline solution. A simple chemical analysis would have the same result. But actually it's something completely different.

I start with a small injection into her carotid artery. Her body convulses as the needle penetrates her carotid and I press down the plunger. Her wailing can't be distinguished from a sensual moan by someone standing outside the door. After all, that's exactly the reason why people come to a place like this.

„Why... doing that?" She almost manages to express herself again. Okay, the effect of the neurotoxin is diminishing, exactly at the right time. Maybe one or two minutes more. She has to be awake.

My mouth is close to her ear. „Justine will die tonight and we both know that it's better this way, don't we?"

„Who are you?" A flawless sentence, well articulated. It's faster with her than with many others. The adrenaline that her

brain releases in a state of panic speeds the degradation of the neurotoxin.

„You would be surprised," I answer. „That's exactly the question I ask myself each new day."

„Don't," she moans. „Stop, I..."

She emits a suppressed cry as I stick the larger syringe into her carotid artery and inject its content into her blood stream while pressing a hand on her mouth.

It takes effect immediately. Not a good idea to try and hold her in this moment. Justine cramps as every single muscle in her body is tensing up at the same time. Her hands cling to the toilet seat, bend it and crack the plastic at two places. She loses her grip, falls into the gap between bowl and wall and is shaken by an seizure. Her skull hits the wall. I take off my jacket, roll it up and wrap it around her head to cushion it against wall, bowl, and floor that her convulsively twitching body is dashing against over and over. She's fighting a desperate battle inside. A battle that Justine is not going to survive, even though her brain resists with all available means. Her death takes several minutes and it's a painful one, to say the least.

The intensity of the cramps finally subsides to slight twitches.

It will soon be over. And then she opens her eyes wide, her eyes that have become functionless now as her brain is overwhelmed by tremendous fireworks of images, noises, voices, and explosions. From the inside. And I can watch as it happens. How the paralytes on her cortex die one after the other, how a wave of glorious insight is descending upon her and makes her scream with pain.

Then it's over.

Her open eyes are still focused on me as her body goes limp and her gaze breaks.

„Justine is dead, Kathlyn," I state with a low voice.

I begin to collect my instruments. Not without first disinfecting them with a spray. I will have to thoroughly clean them later in the hotel. Maybe after I've eaten something. Surely after I've slept a few hours. It has not been easy to wait

for a favorable opportunity this time. I've been awake for more than 36 hours now.

I dial a number that the client has given me. Somebody answers. „The time has come“, I declare. „I'm sending you my exact position.“ At the touch of a button the smartphone transfers my position to the client. He will probably come here.

„Why did you do this?“ Her voice is only a whisper.

Justine is dead.

Kathlyn has woken up.

Her eyes are focused on me.

„Somebody wants you to remember.“ I close the case.

Kathlyn has decided to forget, to erase from her memory what has tortured her and start a new life instead. She has ordered the big full package. A new face, a new identity, a new job, new home and a big bright nothingness where once a dark valley full of demons has been. She has let her trauma be deleted. But also every human being that has once meant something to her.

And that's exactly what my clients can't accept. They want to be remembered. And so they hire me. That's what the whole thing is about. My clients want people like Kathlyn to remember again. Remember a husband, a wife, a son, a daughter or a lover or just the guilt they want to suppress and then erase completely.

I bring back the memories, reconstruct them, revive the past and undo the expensive erasure procedure.

To locate them is the most difficult part. Especially when they leave the country. And, of course, I can't just show a picture around and ask if someone has seen them. They have a new face and don't even remember themselves how they looked before. They can best be identified via medical databases. The set of teeth remains the same, even with new cheeks, nose or lips. Neither do allergies nor orthopedic troubles nor rare metabolic disorders simply vanish. I can determine their current whereabouts with these clues. To be sure, I conduct a DNA test before I start the reconstruction.

The nanobots contained in the injection have switched off the paralytes, nanometer-sized machines that block undesired memories on the cortex. The patient has to help with targeting

in order to finally have them also forgotten after the procedure. As well as having forgotten what has tormented them for so long.

It's crazy. For decades we've developed the technology to preserve information and then we realize that we've done all this for the single purpose of being able to finally erase our own memory.

„I remember," Kathlyn whispers. „I remember it all." She has wrapped her arms around her knees. Her body shivers in this fetal posture. „I remember the bed, the tubes attached to the little body. Her face. How she smells. So strange. And how cold she is. And how she gets paler and paler and colder and colder. Until she is completely composed of ice. She has simply ... faded ... she has dissolved." I scan her heartbeat, the heart rate, the blood pressure. All within the normal range, considering her situation. „I think I've dreamed of her in recent months", she whispers.

„No, that's impossible." I slowly shake my head. „Not even when you sleep. You haven't remembered her. You've just remembered the pain."

Kathlyn couldn't cope with the death of her little daughter and has fled. Others flee from a guilt, she has fled from the pain.

She stares into the white light. Her pupils have shrunk to the size of pinheads. „Why did you do this to me?"

I lift the shoulders. „It's better to face your demons."

„Why did you do this to me?"

„It's said that the original trauma is less intense after a reconstruction. It will not hurt so much anymore." It's a lie and Kathlyn knows it as well as me.

„Why?" She looks at me. „Why do you do this to me?"

I remove the LEDs from the walls and the door.

„Why?"

Switch them off.

„Why?"

Leave her behind in the dark.

„Why did you do this to me?" Her voice gets louder. „Why did you do this to me?" The question turns into a call. The call turns into a shout. „Why did you do this to me? WHY DID YOU BASTARD DO THIS TO ME?"

For a few seconds I'm not sure. But my lips and my tongue have really formed the words and they've really left my mouth. But with such a low voice that Kathlyn can't hear it anymore. Just a whisper.

„I'm sorry.“

Shadows engulf me.

It's much too hot in my hotel room. The noise of television sets penetrates the walls. The spectrum of sound exposure includes at least one cookery show and one porn channel. And, what's more, the hum and the clatter of the defective air conditioner.

I don't watch TV. I haven't eaten yet and the case with instruments that I should clean still stands closed next to the bed.

I regard myself in the high mirror next to the small bathroom. It's as if I see myself for the first time.

We all do this. I've observed it again and again. Even in my clients.

I'm two years old now.

24 months and nine days, to be precise.

My memories don't reach further back. They begin with a recovery room bathed in cold, white light and a plastic box containing all documents regarding my current life. Some knowledge has, of course, been preserved. I speak German, English, French, some Russian, but I have no clue why and when I've learned it. I have some medical knowledge. I'm able to deliver injections, know the difference between parietal lobes and occipital lobes but still don't know enough to be physician. I'm quite good at electronics but not good enough to be an engineer. My most comprehensive knowledge is programming and how to circumvent security systems, but I have no clue when I've learned all this and who trained me. I'm about six feet tall, physically fit and know how to defend myself with bare hands. Maybe I was in the military?

I don't know. There are scars on the back of my neck and on my thighs but when and where they were incurred is hidden behind a veil of white noise. And trying to remember leads to nausea and headaches. That's how it's meant to be, I guess, 'cause I'm sure that I didn't forget by my own choice.

I have no doubt about it.

They promise a new beginning, the end of all pain, even the release of your soul. Without any side effects.

But it's not like that. Far from it.

It's a feeling as if you've just said goodbye to someone, turned away, walked a few steps and you've already forgotten who has been left behind. But you feel him looking after you and sometimes you hear him calling, without a voice but deep in your soul.

Turn around – no, you can't turn around. Your legs carry you further, down an endless corridor, further and further away. How long will this feeling stay with you?

Always. It doesn't leave you anymore. It's like a shadow on your soul that turns the here and now into an endless dream, as if your reality is hidden behind a shapeless plasma that will burn you when you try to touch it.

My face is that of a stranger.

I've let my skull be scanned. It's already more than a year ago. A physician has shown me the ceramics and plastic segments on the shot and explained that someone had worked hard to construct completely new facial bones for me. „It may even have been Asian features. But your other medical data don't fit in with it. You're most likely a European. Northwestern Europe. And your accent, though it's weak, sounds German to me.“ He eyed me doubtfully. „There's some irony in it. You've spent a lot of money for a new life and to erase your past and now you're here to learn something about it?“

My smartphone sounds a faint bell note.

My client has transferred my money. This means he has personally made sure that Kathryn remembers.

On the table next to the bed is a bottle of whiskey. The moment I open it I hear the steps.

In the bathroom, I realize. Somebody must have been waiting for me in the bathroom. I see the shape from the corner of my eye, then a punch hits my kidneys, the pain explodes and I drop to my knees. He's over me and behind me, just like I've been behind Justine. I can hardly resist his grasp. He is taller than me, heavier than me. I'm not surprised by the prick into

my artery. He proceeds just like I did. Two injections. And then I hear what he says. My own words, but with a strange accent:

„Somebody wants you to remember.“ A high voice, female, but not female enough. His face is mirrored in the display of the clock on the bed table.

The ladyboy.

Suddenly my muscles slacken. An anesthetic must have been mixed with the injection. Ladyboy loosens his grip. He knows that I can't stand up on my own. I slump forward while the nanobots in my cortex attack the paralytes that have protected my soul – or what's left of it – up to this moment. From realizing who I really am.

It can't be so long anymore. A few minutes at most.

But it's not how I expected it to be.

Somebody calls me, one voice first, then many. Voices that I can sometimes associate with names, sometimes not. My surroundings dissolve, buckle, turn inside out, tear apart. Places melt, mix with a hurricane of associations, smells, sounds, déjà-vus that someone is squeezing within fractions of a second through the eye of a needle into my mind. Just to remember my name is like a blade plunged into my soul. But there are many more blades. For seconds, for minutes, for days, for all eternity.

The first thing that I consciously perceive afterwards are my white knuckles that I dug into the carpet and the snapped finger nails with blood gushing out. Then there's a strange synthetic taste all over my mouth. I open my jaws and feel how my teeth that have bitten a piece out of the cheap carpet get loose again. My mouth is filled with blood too. One tooth is broken off.

But much more has been broken than that.

The protective wall of my mind has been carried away by the flood of my memories and the insight spreads in me like molten metal, a thousand degrees hot.

Ladyboy is watching me expressionless. „It's said that it will be easier after the reconstruction,“ he claims with a strangely feminine voice.

It's the moment when I finally realize that this is a lie. I've done it to Kathlyn and he's done it to me. „The hell it will“, I squeeze out.

It's like it has just happened.

I still stand in front of the debris, behind me the burning convoy, the stench, the screams. It has been a ambush. Somebody has used a rocket launcher to deal with one car after the other. From one or several of the houses that stood five minutes ago where black smoke is rising from the debris now.

My uniform is completely drenched but it's neither water nor fuel. My bladder has emptied, I think, exactly in the moment when I've pulled the trigger. An instinctive reaction to the movement behind the big wood fence, right next to the Humvee. The Metal-Storm on the roof follows the movements of my helmet. Just press a button to stay alive. 18,000 projectiles in ten seconds. Now I stand where the fence has been. It has vanished. Only a pile of wood splinters is left, hiding what has been hiding behind the fence. No man with a rocket launcher. The four-by-four with the shooter on top has fled in the opposite direction minutes ago. Exactly the place where smoke is rising on the horizon now. They didn't expect that our helicopters would catch up with them.

What has moved behind the fence will never move again.

A little doll lies at my boots. The projectiles have torn it to two halves. But the little hand right next to it seems still trying to grasp it.

I vomit on the carpet of the hotel room.

Ladyboy is watching me. „You will soon feel better.“

It's not easy but I manage to stand up on my own. „Yes, I think so. I will soon feel better.“

When I rush up to him, he ducks me deftly – but that's exactly what I want. I can still forget. It has worked once. I'll just make it better this time.

The window glass is no obstacle. It gives way like a water surface that you plunge into. The darkness receives me and engulfs me. It's so peaceful up here, 24 storeys above the pavement. Ladyboy's face and his extended arm grasping at nothing are above me. He's shrinking fast.

It's so pleasantly cool here, so quiet.

It's so ...

Rest in Peace

HELMUTH W. MOMMERS

Translated by Richard Kunzmann



Helmut W. Mommers, born in Vienna in 1943, was as writer, illustrator, translator, literary agent and editor of groundbreaking science fiction anthologies one of the first allrounders of the German science fiction scene. After a break of 36 years and a successful business career he returned to his old passion as one of the co-founders of Nova, editor of the renowned anthology series Visionen and author of more than thirty new short stories, some of them collected in his book Sex, Love, Cyberspace.

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I hate funerals, have always hated them. Even more so when they're held on moist cold November days while it's drizzling. Like today. There one stands, shoulders pulled up, left hand holding an umbrella, breathing fog and praying that the priest cuts things short out of mercy for the living, before the puddles seeping into the thin footwear climb up cold legs. Like crows with folded wings, the mourners have gathered around the deceased's coffin, that pale countenance of death, their thoughts weighed heavily by grief or the fear for their own mortality, with the onset of hunger steadily knotting up their insides. Finally! An amen seals the ceremony and frees people to scoop up some earth and toss a final farewell down onto the coffin.

It's not for me. I decided on a cremation for myself, out of consideration for those loved ones left behind: a warm goodbye inside a heated chapel; this, even though it would've made no real difference to me in my current state. Well, I had the choice. It was my own funeral, after all.

And so people filed past the imitation wood coffin, to look upon the dearly departed one final time and deposit a farewell flower on the glass lid. A few even suppressed a tear or sniffed, as though the winter weather was somehow to blame. Regardless, I did not expect sobbing.

I looked great; compliments to the undertakers. From my ninety-one-year old discarded shell, they had magically created a distinguished graying gentleman, dressed in a black smoking with a carnation tucked into the breast pocket, bed-

ded on white silk. If my body didn't lie there so motionlessly, one might have thought that a simple command was all that was needed to have it rise up and ask for a dance. Seen that way, it was almost a pity to step down.

Pointless observations. Against the back wall a greedy maw tore open to suck into its fiery jaws the coffin containing my meager biomass, which wouldn't even have made it as an organ donor. Well, that was it, then.

With my wife at my side, seemingly untouched, I accepted expressions of condolences. One after the other I looked them in the eye: children, grandchildren, great-grandchildren, relatives, friends, acquaintances, business partners. I shook hands, slapped shoulders, had my own shoulder patted, was gently embraced. It felt strange. Even more awkward where the hackneyed expressions: „You were a good friend“, „I'll never forget you“, „You were always admired“; the same old litany. I thanked them with a mumbled 'same to you', or grumbled my approval.

Finally I was alone with my wife. She turned to me, I turned to her, our eyes met. She started to embrace me, her mouth opening for a kiss, but at the last moment she froze. Blushing, she lowered her eyes and whispered „Good luck“, before fleeing with the retreating mourners, my „You too“ barely within earshot.

All of it I registered like an unaffected bystander, my emotions still beyond my control.

Undecided whether I should follow the procession to the funeral reception or first wait for a heavenly revelation, I paused, until the door opened again. It was the clergyman.

He pressed a container, not unlike a vase, into my hands. Instead of flowers it had a lid with the inscription:

Rest in peace

Dust to dust

Ashes to ashes

Under those words was written my name, followed by dates.

5

„What do you want to be one day?“

I had been asked this question more than I counted my age. I clapped down a tinted visor and playfully lifted my menacing

He was repeatedly nominated for the Kurd Lasswitz Preis and the Deutsche Science Fiction Preis (German Science Fiction Award) and received a Kurd Lasswitz Preis in the special category for his engagement for German science fiction stories. Translations of his stories have been published in the USA, Japan, France, Italy, Spain, Croatia, Greece and Russia.



Translator Richard Kunzmann (born 1976) is a Namibian born novelist who grew up in South Africa and predominantly writes crime fiction. His first novel Bloody Harvests (2005) is a murder mystery set in South Africa. Two further novels, Salamander Cotton (2006) and Dead-End Road (2008), feature the same characters.

laser cannon. Immediately coordinates flashed across the screen, flanked by glowing green columns as sensors drew a bead with breathtaking speed, metrically registering the target: grandfather.

„Space-pilot," I shot verbally. „Ffft, fft," the cannon went. „You're dead!"

My grandfather smiled. „And what's the cannon for?"

„Blowing away space-pirates."

„But there aren't any space-pirates."

„No yet!" I sighed at such ignorance and lifted up the visor.

„But when we reach the asteroid belt ..." Arbitrarily, I shot my laser in all directions. „Ffft, ffft, ffft, ffft," it went, lights flashing.

„Till then it's still a long way to go, my boy." Grandfather sat me down on his knee and hugged me with one arm. „Who knows if us humans will ever –"

„Of course we will!" I protested. I knew that we hadn't yet found a successful way to transport astronauts beyond Mars' orbit, with the sun's radiation being so dangerous, but if we could finally have warp drives ... or if the first aliens arrived with their superior technolog ... In my mind's eye I could see them marching towards me, weapons clanging. I reflexively let rip with a charge of electro-magnetic particles and watched them scatter in fear. „Wush!" I went. „Karump! You're dead!"

Grandfather laughed. „Who was that you just blew into oblivion?"

„The aliens. We'll grab their spaceships ... and their weapons ... and all their technology and ... and then we'll fly to Jupiter and Saturn and Pluto and ... all the way to the center of the Milky Way. Yes, sir!" I puffed with enthusiasm.

I was five.

26

„The high court hereby pronounces its verdict. Please rise."

Chairs scraped on the sides of the defense and prosecution.

„In the name of the people I pronounce this verdict. The accused, Roman Fitzgerald –" the judge's gaze hit him like a guillotine „– is found guilty in terms of ..." Paragraphs and para-

graphs. I didn't listen; I knew the charges off by heart. The sentencing of this criminal was just a formality; only the kind of execution was left to the judge's discretion. „... and is sentenced to death."

Now it came. To the death it was, but was it final?

„The accused loses his right to exist as a human. He is stripped of all his civil rights, and his shell is to be cremated. The death sentence is suspended with probation." The judge paused artfully in the tense silence, then he announced, „Probation is set at three hundred years. Thereafter, exile is repealed. The people's judgment has been pronounced and this court is adjourned!"

I expected it; no, hoped it. The defendant received a second chance. His personality would be scanned, zipped as a data package, stored electronically, enveloped in titanium, and finally sent out as a humanoid robot on the long trip to the asteroid belt, Jupiter, Saturn and beyond; who knows, as a prospector, a miner, a willing tool, the long arm of humanity in outer space.

I almost envied him.

Laptop over my shoulder, I left the courts with my colleagues of the defense. We had something to celebrate.

Back then I was just twenty-six.

32

There are moments in life when you need emotional support. This was one of those moments.

My first wife left me. She'd packed her bags, deposited a note on the commode, fetched the little one at kindergarten and disappeared, without a forwarding address. I would hear from her lawyer, she had said. Of all people.

I normally don't drink alcohol, but for social occasions we always had a small selection in reserve. Now I befriended Mr Scotch, without ice. Supported by Rachmaninov, I was near tears after the fourth glass and threatening to sink into self-pity. It was comfort I wanted, but sorrow I found, on the altar of self-righteousness.

The altar! Our ancestral altar.

Tumbler in hand, I circled over to the little alcove in which our family altar stood, 3Ds of our loved ones lined on top of it, and more framed, partly-faded ancient photos hung on the walls above, left and right of the tabernacle.

My glazed eyes wandered over the familiar gallery, followed by the eyes of the miniaturized loved ones in their three-dimensional prisons. Evelyn! With my attempt to put the whiskey glass down I touched her frame – immediately she blew me a kiss and piped, „I love you!“ I quickly turned the frame face down, which smothered a second confession of love.

In its place I picked up Evie's picture with both hands, as though I had to hold on tight to something, and promptly my angel chirruped, „Hallo daddy; daddy – I love you, I love you so –“

I pressed a warm kiss on that face, and wiped a tear from the screen with my sleeve. When I replaced her, she answered with a „Come again, soon.“

Whom to ask for help, whom to trust? Would father and mother understand? No, of course not. For them marriage was holy, and if my wife left me then only I was to blame. My sister? No way, she always stood by Evelyn. Grandfather! Yes, he had always understood me. But he was dead.

Perhaps I should wake him. Could I disturb his rest? Hesitating briefly, I opened the tabernacle. In a moment a hologram appeared: grandfather, shrunk to twelve inches, lifelike but still inanimate. Now I'd see if he would for a few moments of his sheer boundless existence in cyberspace leave the Nirvana into which he had withdrawn and grant an audience to a mortal like me.

„Hallo, my boy,“ it spoke and smiled generously. „Nice of you to visit me again.“ He winked mischievously. „What's on your mind?“

44

One day Mona, my second wife, surprised me with the suggestion, „I want to work.“

„What – work?“ I was flabbergasted. „An attorney's wife doesn't need to work.“

„I'm bored.“ She inspected her fingernails.

„Then organize the household. Mind the children.“

„It's not necessary. Robbie does a better job of it than me.“

Yes, I'd reached the same conclusion. We relied more and more on electronics, automatons. Where was it all going? A time would come when we'd be helpless and unable to cope with life, completely at the mercy of machines, from the cradle to the grave.

What could I say to that? „Work is a privilege,“ I tried my luck. „I hardly think that you'll find something.“

Maybe she was thinking of a career in entertainment – a mannequin, movie star, talk-show hostess, cyberfairy, something like that. But no, she couldn't be that unrealistic: all those jobs were already taken, if not by virtuals then by android doubles.

„That's not what I meant.“ Mona flicked a strand of hair from her forehead with an exaggerated movement that hinted at her repugnance for work. „I meant something charitable, some ... noble civic service.“

Oh, that really was something new. Mona a volunteer – I looked forward to that.

„That's very honorable,“ I said. „And what were you thinking of?“

„I don't know ... something will come to me.“ Seemingly satisfied with her fingernails, she crossed one leg over the other and began inspecting her green-lacquered toenails, over the rim of a cognac glass.

Sometimes she came across as one of those household androids – better: playmates. Maybe, I thought, I should replace Robbie, our little tin-man.

„What a wonderful idea!“ rejoiced Mona at my suggestion. „I've always wanted a butler. And maybe a gardener. And a chauffeur ...“

The mention of a chauffeur was complete nonsense; after all, who still got around in a manual car? And a gardener ... but a butler? Maybe the kids would after all have a competent replacement for their parent.

We agreed on two androids. A butler and housemaid.

Although not human, just AIs, artificial intelligences, they at least were citizens, even if they were just second class.

I was forty-four, then.

62

When I married for the fourth time, this time to a woman a decade younger than me, I was already sixty-two and both my children had established families of their own.

Nadine ardently wanted a child from me, and so she would have it. We could fetch it the week after.

It was only later that we decided to take out life insurance with an option to clone. The sales consultant beamed. „A wise choice,” he purred. „Alternatively, I recommend reanimation.” On our eloquent silence, he continued: „In the case of discord you can rest assured that your partner can be resurrected as a fresh young maiden – ahem – or virile bachelor, the way you lovingly remember him. On the other hand, you can transfer all his memories as complete, and in whatever form, as you find convenient.”

This last sentence slid so easily from his lips that he must have uttered them a thousand times before. So what, though.

In layman’s terms it meant this: If one of us died, one could resurrect him as a clone. With or without memory replay. Or even just a part of them. For the surviving partner it’d be relatively easy, but for the clone it was a new beginning, because however he felt he wouldn’t be the same as his deceased counterpart. It wasn’t immortality, that’s for sure.

For the child it wouldn’t matter, at least in the first instance. The main thing was that it had its parent again.

If I died before my wife, which would most likely be the case, would she reanimate me as a virile youth, and transfer a brain-scan? What would that feel like, when I suddenly saw an older woman in front of me, with wrinkles and liver spots and sagging upper arms, instead of the tender nymph of my memories? And alternatively, what would she feel?

One day I’d find out, or maybe not. When I signed up, I didn’t want to know any better.

0

I didn’t survive her, after all, just as I didn’t live longer than my fifth wife. They all outlived me. At least my mortal shell, which I shed at ninety-one and now held cremated under one

arm. I was still myself, with all my memories up to immediately before the brain-scan. No pseudo-I with replacement memories transferred during virtual excursions in cyberspace, which could let my clone doubt whether he'd dreamed it or not, or whether he simply suffered from schizophrenia.

I never trusted this cloning business. I had decided differently, realized my childhood dream.

There it rose up in front of me, majestic and filled with promise, the shuttle that would take me into orbit, me and the few belongings I could take on my long journey. At the sight of it I felt like my heart would quicken, my throat would constrict, but that was just my imagination, a phantom sensation. I didn't have a heart. And I didn't have to breathe either. Not anymore since I died. I now had other needs.

Not entirely different from the bunch of criminals that just thundered past me in their bulky titanium housings, condemned to an organic death, but reprieved in their service on inhospitable planets, deep in outer space. They, too, received their second chance. Like me.

I wasn't going to be a space-commander, a Top Gun or Universal Soldier, and I wasn't going to navigate starships or fight in distant battles, either, the way I'd wished it as a young boy. Instead, I was going to set out for the stars and take part in the biggest adventure of mankind – the conquering of space. Me and those like me, human-robots, first class.

We'd be extensions of humanity, who alone could reach into the furthest corners of the universe.

Short of the shuttle I emptied the urn over the concrete runway. With a roar and a rumble from the turbines, my mortal remains would be blown to the four winds. It would be a worthy departure and a hopeful new beginning.

The Age of the Burning Mountains

HORST PUKALLUS



Horst Pukallus was born in Düsseldorf in 1949 and lives in Wuppertal today. Initially an insurance clerk, he became involved with the science fiction scene in the late 1960s, first as a critic and then a short story writer for fanzines and magazines and turned a full-scale professional in 1975. He gained a massive reputation as translator of significant writers such as John Brunner, Alfred Bester, Philip K. Dick and others and was repeatedly awarded the Kurd Lasswitz Preis as best translator of the year. Even more

Four weeks after the global Catastrophe the initial panic had abated; people had learned to concentrate on what was feasible. The brute facts had reduced the initial chaos to a status quo in which the irreversible had become bearable, a postmodern stalemate. The bewilderment and shock, the horror and disbelief that accompanied the initial crisis had given way to a widespread mood of calm resignation.

The Cosmic Cloud

As after all catastrophes, most people adjusted to making do with what was left before venturing on a new beginning.

Wencke was one of the minority whom the Cosmic Cloud had caused severe psychological problems. She had been to college and worked her butt off to get a job as an engineer with the maintenance service of the German Federal Post and now there was a fault that even the best maintenance engineer could not repair, the fault of all faults, a communications doomsday: one fine morning in June, shortly before 3 a. m., planet earth had sailed into a Cosmic Cloud which had brought all equipment using electromagnetism to a standstill. Wencke felt completely disoriented, hurt, cheated by life; she took the disaster personally and got drunk every day. Marten Tilbert's incomprehensible attitude, the stoic calm he displayed, was the last straw, driving her to distraction and — fueled by alcohol — to irrational outbursts of aggression.

'It'd be much worse if it had happened in winter,' Marten kept saying. 'This way we have enough time to prepare for winter.'

'Huh!' Leaning against the old cast iron pump, Wencke swayed in the sunshine, a wine glass in her hand, a cigarette dangling from the corner of her mouth. She had become a chain-smoker. 'And what are you preparing for, pray? You just sit around. For weeks you've just been sitting around. Could you perhaps tell me what you're preparing for?' She gestured wildly, strands of blond hair falling over her spectacles into her sweat-streaked face. The sun was beating down and the wine did its bit to make Wencke even more hot and bothered. 'I thought you were a real man, but now I see you for what you are. Now I see you're nothing but a wimp.' The spitefulness twisted her lips in an ugly expression.

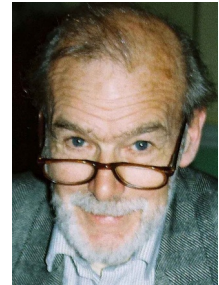
Martin gave a quiet sigh, the latest of many such sighs during similar quarrels. At the very beginning, when everything suddenly stopped, he too had been literally distraught with surprise and consternation. His sister Gerti had called – not for the first time – in the middle of the night from Kuala Lumpur, totally convinced she was being stalked by the pockmarked waiter who did room service and threatening to throw herself out of the hotel window the next time there was a noise outside her door. Marten was just wondering whether it would be reprehensible to encourage her to do that very thing, in order to put an end to these constant nocturnal calls, when the line abruptly went dead. No crackling, no hissing, nothing.

'If you say so.' Wencke was right. For two and a half weeks he'd been sitting in the garden doing nothing. When it became clear that the monetary system was not going to collapse, at least not in the immediate future, he had sold his house without further ado and sent Rutger off with the proceeds. Since then he'd been lounging in the sun, waiting. He had no choice but to wait, he'd put all his eggs in one basket. 'You ought to give up smoking. Cigarettes are getting short. Most of the production's going to the various military units.'

'Huh!' The filter of Wencke's cigarette began to smolder; by now she was smoking every cigarette down to the filter. 'I want to know what the point is, what you think you're doing.'

Marten said nothing. As far as he was concerned, informing Wencke was out of the question and it had come to the point,

important were his highly original, stylistically brilliant novellas and short stories that marked him as one of the leading writers of a new wave of German science fiction from the late 1970ies onwards. Still active today, his latest book is the collection Am Abend kamen die Schnecken.



Mike Mitchell, best known as a translator of classic and contemporary German literature to English, was for many years an academic with a special interest in Austrian literature and culture, before he became a freelance literary translator in 1995. He has published ninety-nine translations from German and French, including Gustav Meyrink's five novels and The Dedalus Book of Austrian Fantasy. His translation of Rosen-dorfer's Letters Back to Ancient China won the

1998 Schlegel-Tieck Translation Prize. The translations that he generously permitted us to republish in this InterNova issue are from Franz Rottensteiner's *The Black Mirror and Other Stories: An Anthology of Science Fiction from Germany and Austria* (Wesleyan University Press, 2008), his only foray into science fiction.

after several fruitless arguments, where he had stopped even giving evasive answers. He was quite simply fed up with her. 'We're not married,' he said with a brusqueness bordering on brutality. 'I don't have to account for my doings.'

As early as one week after the Catastrophe it had become clear that without the advantage of communications and the media, the central power of the state had suffered a catastrophe of its own. The Tsar was far away again, so to speak. A government which could no longer coordinate its various executive organs nor speak to its citizens by radio and television lost a considerable part of its influence and was, as became apparent, ultimately powerless. The formation of regional groupings of ambitious office bearers, politicians and civil servants — the composition of which differed from the outset from that of the parties in the Federal parliament — accelerated the fragmentation of political and state institutions and encouraged the development of a multitude of smaller centers of power.

In the second week AC (After the Catastrophe) it was obvious to everyone that the new situation was not a temporary blip, a nuisance that would pass, like a short power cut. Astronomers and astrophysicists had only noticed the Cosmic Cloud when it surrounded the lunar orbit and contact with the moon base broke off. They just had time to produce the hypothesis of 'semi-material stellar plasma' before the cloud enveloped the earth as well, paralyzing the machinery of information, manipulation and news reporting. Researchers and scientists might, with time, have been able to discover the nature of the Cloud and develop means of neutralizing it. The strange thing was that natural electricity continued to exist — as could be seen from the fact that there were still thunderstorms — so it must have been something specifically affecting electromagnetic processes in mechanisms. Since, however, the complicated machines and apparatus which would have permitted the appropriate investigations were no longer functioning, there was no prospect of things being put right. And Cosmic Clouds extended over many, sometimes hundreds of light years; the earth would stay in the zone of 'semi-material stel-

lar plasma' for a very, very long time, perhaps for ever. Humanity had to accept that a new, completely different epoch in its history had dawned.

Wencke went to the summerhouse, presumably to open another bottle of wine. Marten relaxed, lay back on the lounge. She's having a hard time of it, he admitted to himself. It's not easy to understand what I'm up to. No one, neither among the neighbors nor his friends, could work out why he should suddenly move from a luxury house to the garden-plot-with-summerhouse that had belonged to his grandmother — who had been carried off by the Cosmic Cloud at the same moment as the majority of others with pacemakers — and despite having sold his house was completely without funds. He had not told anyone, apart from Rutger, but Rutger was away, so no one in the area could ask him. Not Wencke, and above all not Bosshard. Bosshard must not find out what Marten was doing until it was too late for him to sabotage his plan. Marten's plan was complicated and involved high risk. It could have been less complicated if the banks had still been making loans, but because they had to pay half the people to chase up the other half — their defaulting debtors — they had given up lending; after all, things had become difficult enough since terminals, telephones and fax machines were gathering dust. The smart banker thought of the coming winter and invested in coal mines.

It was only August — at least it would be in a few days — and Marten Tilbert wasn't thinking of the winter. If the project he had set in motion should fail, suicide was the best bet anyway; until then he preferred to retain his optimism. The sun was warm on his face and he was enjoying being idle after having spent twenty years in the city administration office block dealing with pettifogging nonsense under constant pressure. He drank cold tea (now and then a glass of Grannie's homemade fruit juice) and waited. He was too comfortable to bother with disagreeable things such as a possible choice between suicide and a winter without money or fuel.

His sunglasses had slipped down to the end of his nose and he squinted over the top at his surroundings. Everything was so

incredibly quiet, quieter than it had ever been before the Catastrophe. The garden plots were on a slightly higher piece of land between the railroad embankment — with no trains since the electricity had gone, perhaps someone could get a few old steam engines working — and the canal. Beyond the canal was a meadow, then, more or less parallel to the canal, the freeway, a gray line across the landscape, totally devoid of traffic since car ignitions had stopped working. To the south west, where the canal and freeway appeared to converge, the few high-rise and other tall buildings of a typical German small town could be seen: two church spires, several stores, a water tower, the council building, a ritzy hotel and grain silos. They looked like the symbols of an as yet confused redistribution of power, which was still in full swing — one more reason why Marten Tilbert preferred to wait. (The last head had not yet rolled.)

Since Bosshard, the director of council services, and his followers had won the shoot-out with the burgomasters and their supporters, they had taken over the town hall as the Law and Order Party (LOP), while a coalition of functionaries of the parties that had formerly run the town had made the administration high-rise building their headquarters. Independent activists had set up in an empty department store, which had been plundered, partly out of foresight, partly plain greed. A group of crazy fanatics, under the leadership of a so-called High Holist, who proclaimed a cult of the Holy High Energy with a quasi-religious militancy that came close to terrorism, had taken up residence in the now redundant telephone exchange. All the groups had built up considerable stores of schnapps, guns and ammunition as well as canned food, but for the moment were avoiding open armed conflict. By seizing all the carrier pigeons in the area, as well as all the local horses and donkeys and most of the bicycles and, in addition, recruiting long-distance runners, the LOP had secured a decided advantage in communications and a better tactical starting position, which far outweighed their opponents' considerably larger stocks of high-proof spirits.

The next few months certainly promised to be very interesting and eventful, and Marten Tilbert was glad to be a mere

onlooker, at least to remain so for the moment.

There was only one thing that occasionally clouded his calm and cheerful mood: he kept thinking — more often than he would have liked — of the poor sods on the moon base. They'd have had no chance once all their expensive technology broke down, they must have suffocated or frozen to death. Fortunately he didn't dream of them. And at least Gerti couldn't ring him up from Kuala Lumpur in the middle of the night.

The New Martyrs

While he was waiting, Marten lived on Grannie's bottled fruit and vegetables, the apples and pears in the garden plot plus what was left of the rice and pasta he'd brought from his house. He cooked on an improvised barbecue, a metal grating, black with rust and soot, set on a few bricks. He read his collection of science fiction, always his favorite pastime, but he also read the local leaflets and little newspapers some people produced on their own mechanical duplicating machines.

By week 3 AC the lack of materials meant most were produced by the relatively simple process of transfer-printing; the age of the glossy magazine seemed an eternity ago and, given the impossibility of computerized setting, the eye no longer expected sophisticated formatting; plain information was what everyone wanted. As far as books were concerned, it would probably be some time before the old methods could be brought back on a large scale, but there were innumerable unread books and the libraries were crowded as never before.

The most successful newspaper was the artful Sewer Gazette, a four-page transfer-printed sheet the publisher of which, a certain Alfred E. Neumann (Marten had the feeling such a stupid name as 'Newman' must be a pseudonym), typed single-spaced on an evidently ancient typewriter. It not only provided relatively comprehensive — given the circumstances — information, it also commented on current political developments. Neither the Law and Order Guardian nor the Sacred Kiloword, the organs of the LOP and the Holy High Energy cult, could compete with it, either in quality or in popularity, and

the distributors of the Sewer Gazette were well advised to deliver it solely at night, pushing it through letterboxes or dropping it on doorsteps. Bosshard and the Holy Holist had already started a vicious smear campaign against 'Alfred E. Neumann' and Tilbert expected daily to hear they'd set a price on his head.

It was only the Sewer Gazette that had reported the founding of two corporations in the northern industrial region. They were of a new type, though with similarities to commercial companies: the Freak/Tech Syndicate that was pushing the development of alternative technologies or, actually, ones that had long been regarded as out of date; and the Anti-Tech League which appeared to be promoting the transformation of society into a biotopic system of flora.

From its description this latter seemed not unattractive to Tilbert. Specialized plants that would perform all the tasks of the vanished twentieth-century technology without generating the same refuse or using the same amount of energy, seemed a goal worth aiming for, though he couldn't quite see how such strains could be grown without recourse to genetic engineering.

Perhaps because they wanted to do what was best, the Freak/Tech Syndicate and the AntiTech League both pursued really aggressive policies; they needed raw materials and other resources — staff and means of communication, money and land — and it was clear that they were on a collision course with bureaucratic and religious bigwigs of the more southerly communities. Bosshard at least was very conscious of this danger and in his search for friends and allies he had clearly realized that Tilbert was conspicuous by his absence. One day he came looking for him.

The grotesque, barbaric spectacle of his arrival had brought Marten out in an even greater sweat. As the procession plodded its laborious way across the canal bridge he had ripped up the paper he had been reading — the latest edition of the Sewer Gazette, with headlines such as: SCHOOL-BOARD BULLIES PUSH PARENTS AROUND, BOSSHARD — BOSS OR BOOBY? and ACTIVISTS CHALLENGE FREAKTECH — dropped the shreds

on the glowing embers of his barbecue and quickly smoothed out a crumpled copy of the Law and Order Guardian, placing it in clear view on the garden table next to his favorite book, Robert A. Heinlein's *Farnham's Freehold*. The torn-up scraps of the Sewer Gazette had burnt to ashes by the time Bosshard, escorted by guards armed with guns, rubber truncheons, knives, nunchaku and baseball bats, had descended the steps of his transport — he had gone so far as to have his official Mercedes converted into a Sedan chair. The Age of the Cosmic Cloud seemed to generate its own kind of madness.

'What's all this, Tilbert? What're you doing sitting around here?' Bosshard had grown plumper, but below the black hair combed straight back his forehead was furrowed by worry lines which were now cleft by a vertical crease of displeasure. 'Don't you know that you're still in post, I'm still your boss? Do you know how long it took to find out where you were living? Don't you know that I have more important things to do?'

Marten smiled like a man whose only thought was for sun-bathing and a quiet life. 'I've gone private. Don't feel like going to the office any more.'

Bosshard gave an understanding nod. 'Lots of people have the same idea. There's no demand for many professions any longer, so they make a virtue of necessity. But we can't do without administration. I'd even go so far as to say now more than ever.' He scratched his double chin. 'Actually I expected you to keep on working under me.'

Tilbert shook his head. (Fortunately Wencke was in the town exchanging her last jewelry for cigarettes on the black market so couldn't stick her oar in.) 'I sold off the house.' He was sure the director of council services would have made inquiries and know, so being open without giving anything away was the best means of allaying Bosshard's suspicions. 'I'm going to invest the dough in a private museum for plastic bags.' He jerked his thumb over his shoulder at the cardboard boxes beside the summerhouse with the hundreds of plastic bags his granny had, for some inexplicable reason, collected in the course of forty years. 'A hobby just now, but I'll make a living out of it once things are back to normal.'

Bosshard seemed amused, a smirk almost appeared on his thin lips. 'The end of civilization as we know it has not yet been averted, Tilbert. You're good at organization, I can use competent people like that in the LOP.'

Tilbert waved the offer away with a smile of imperturbable simplicity. 'I know my limits. The world's completely changed. I wouldn't be up to it. In this kind of situation it's men like you that are needed.'

Men like Bosshard were susceptible to flattery. The conversation went on for a while, but eventually the leader of the LOP gave up urging him to join them and left, remarking that he was happy as long as Tilbert wasn't working for anyone else. Seated in his Mercedes on the shoulders of his poor bearers, he disappeared in the direction of the town, along the path on the other side of the canal, and Marten, for the first time since the Catastrophe, had uncorked a bottle of wine and drunk it all himself.

The Sewer Gazette was the only news-sheet to report the true extent of the wave of suicides, which began in week 4 AC, and to make some effort to analyze it. The people whose life had lost its meaning with the disappearance of modern technology mostly belonged to technical trades and professions: engineers, technicians in all areas, various tradesmen, computer specialists from programmers to hackers, media workers from sound mixers to newspaper editors, pilots, racing drivers, radio operators, motor mechanics, electronic musicians, any number of car-owners who simply could not live without the thrill of speed and singers who could not sing without a backing track. What was striking was the way the manner of death varied according to profession. The Sewer Gazette published a – probably incomplete – list:

<i>Hanging</i>	<i>Self-immolation</i>	<i>Drowning</i>
telephone technicians	racing drivers	presenters
computer freaks	welders	editors
radio operators	electricians	musicians
radar technicians	air-conditioning specialists	singers
	radiologists	
	physics lab technicians	

<i>Jumping</i>	<i>Poison</i>	<i>Other</i>
car fanatics	sound mixers	engineers
pilots	newsreaders	various
engine drivers	genetic engineers	
TV mechanics	nuclear physicists	

By this time even in the local region the victims were in their thousands. In general people reacted to these acts of desperation with silent horror, though also with understanding and a certain respect. (No one liked to have the ground suddenly cut from under their feet.) The Holy High Energy cult, on the other hand, had the bad taste to exploit these unfortunates for their own obscure purposes, the High Holist promptly declaring them martyrs of the departed Divine Entity that had previously kept the world going at the press of a button, for which the sect now worshipped and adored it. Soon after it became known, this appropriation of the dead for occult purposes had set off a new wave of suicides, which was just abating. The loss of meaning and the feeling of helplessness combined with the lack of short-term alternatives appeared to have made this new 'martyrdom' desirable. The members of the cult chiseled the names of the new martyrs on all the concrete walls throughout the region. For miles around the area was marked with the stone membership list of a new elite of the hereafter.

The relationship between Marten and Wencke had already started to cool off seriously months before the Catastrophe. Marten's favorite pastime was reading science fiction and clearly at some point Wencke had started to get bored with the company of a stay-at-home bookworm. In the spring he had realized she was having an affair with another man. Since then he hadn't touched her. In certain matters Tilbert, an official and offspring of a family of officials, could be very particular. He had given up bothering with her or what she got up to.

It was in week 5 AC that a violent argument broke out between them for the first time since the beginning of the summer. The cause was a trivial matter, namely matches.

'My lighter's empty.' Wencke came stomping across the garden, one cigarette between her lips and one in her fingers. Both were unlit. 'Where're your matches?'

Marten slowly raised his eyes from the book he was reading, Heinlein's *Starship Troopers*. 'Why?' He kept his last three and a half boxes in one of the pockets of his sports jacket which for some time now he'd always been wearing over his bare chest.

'Why?' Wencke squinted at him, her face ravaged by strain and alcohol. 'Stupid question. Because my lighter's empty, of course.'

Marten gave her a look of absolute astonishment. 'You don't seriously believe I'd sacrifice one of my matches for your coffin nails, do you?'

'What?' Wencke stood beside his lounge, rigid with outrage. 'What? And why not? Why ever not?'

'Each match means one hot meal a day,' he replied in contemptuous tones, as if Wencke were unbearably slow-witted. Yet the simple fact was that she hadn't started to adapt. She continued to live as if nothing had changed, or as if the old affluent lifestyle would be possible the very next day, as if the Cosmic Cloud were just a dream. 'That's why it goes without saying that I will not waste a single match just so you can light up.'

Thrown off balance, Wencke took a step backward. Marten's response had clearly taken her breath away. 'You won't give me a match?' she asked incredulously.

'Not a single one,' Marten said, unable any longer to conceal a certain spiteful pleasure. It was a cheap, petty revenge but it gave him a disproportionately deep sense of satisfaction.

Wencke swallowed audibly, gasped for breath, then hurled a torrent of abuse at him. 'Idiot! You bastard! You shit! That really is the limit! You're the limit! You —'

It was not a loss of control when Marten Tilbert shot to his feet and slapped her across the face with the back of his hand. On the contrary it was maliciously calculated. She had provided the excuse he had been more or less consciously waiting for. With a shriek, Wencke and sank to her knees, pressing her hands to her mouth and nose. Blood was running down over her chin, seeping through her fingers.

As she took herself off, sobbing, to the summerhouse, Marten made himself comfortable in the lounge and picked up the Heinlein. He was already feeling ashamed. Wencke was unhappy because she'd never be able to work at her profession again. Her career with the German Federal Post was over for good. That was why she behaved the way she behaved. And what had just happened was the ultimate nastiness in the process of drifting apart, of mutual estrangement. True, she no longer stood by him, she was most despicably unfaithful to him and he despised her attempts to get him to wallow in self-pity with her. Yet he felt ashamed. There were limits below which one's self-respect should not let one fall.

'Sorry,' he shouted at the summerhouse. No answer. After a few minutes Wencke's whimpering stopped. Presumably she was once more seeking comfort in alcohol.

It looked as if the act of laziness, simplemindedness and restraint he had put on had convinced Bosshard and he was going to make sure that the surveillance under which he had been placed would not suggest differently. At least Bosshard did not return and Marten did not see anything which made him fear the LOP leader's suspicions had been aroused.

One evening, as it was getting dark, a priest walked past on the opposite bank of the canal. 'Do you need any pastoral advice, my son?' he asked, just before night fell.

Marten grinned. 'Too late as usual, padre' he shouted across the canal. Then he couldn't see the man any more. The black figure was swallowed up in the darkness.

All around, as far as the eye could see, flames flared up. The people, deprived of almost all means of communication, lit fires on all the hills, hummocks and mountain tops, signaling their solidarity with those they could no longer reach by letter, telephone or telegram, fax, Fleuropa or UPS: we still exist. We're here. You're not alone.

The Coming Man

It was the realization of how completely the loss of communications technology had cut ordinary people off from contact

with anyone outside the area they could reach on foot from their residence that had inspired Marten Tilbert's great plan. As a result of the Cosmic Cloud the masses were suffering from communications deprivation. Now the neighboring town was as far away as it had been at the time of the stagecoach — and there weren't even stagecoaches any more.

Using a liberal interpretation of emergency laws, the politicians, ministries, police and other bureaucrats had immediately taken over what was left of the Federal Postal Service in order to provide at least a messenger service among themselves. Bicycles, horses and carrier pigeons had either been commandeered by them or 'requisitioned' by individual Army units, the new parties, organizations, syndicates and their guards or, more precisely, their militias. The search for long-distance runners was taken to absurd extremes. Individuals, families, ordinary people had no way of sending even the briefest message to their grandson in Flensburg, their brother in Passau or their aunt in Oer-Erkenschwick. And mobility was as good as nonexistent. Here was a yawning gap in the market that cried out to be filled, though with no indication of the how, who or when.

For the moment the population accepted this isolation. Since most no longer had any occupation, they initially went back to basics. The hot summer weather encouraged a permanent street-party atmosphere: day in, day out, groups of people gathered in the open air to cook, argue, laze around and moan. But the grumbling about the lack of any long-distance communication gradually grew louder and louder.

That was the point at which Marten Tilbert saw his great, once-in-a-lifetime chance. If he could provide a service that was faster than horses, almost as fast as carrier pigeons and more accessible than long-distance runners, in brief, a way that would allow them simply to send letters to relatives and friends again, it would not be long before he was the most popular and therefore influential of the newcomers on the gravy train of power. First of all he had to set up the infrastructure, but if he managed that, his fortune was as good as made.

As time passed, the hectographed local news-sheets published reports from other regions. An almost uniform picture emerged of the disintegration, fragmentation of public life, the formation of city states, private organizations, syndicates and completely new parties. The threat of conflict loomed on the horizon, though its precise nature could not yet be determined. The general mood of cheerful acceptance could not hide the fact that winter was approaching inexorably. Marten was often struck by the fear that the true catastrophe was yet to come. At such times he felt depressed and disheartened. Despite his career as a civil servant he had largely, as Erich Fromm formulated it, 'remained a person and not become a thing' and was therefore capable of 'suffering himself at others' suffering.' But these moods were only a result of vague feeling. What he saw clearly was that if he was to survive, his enterprise had to be firmly established when the time came.

Of course, he wasn't the only resourceful person in the world. On the Tuesday evening of week 6 AC drums sounded and he realized that the competition had not been idle. The drums had a particular, unmistakable rhythm.

After the drumming had continued through the Wednesday, Marten had a further cause for concern on the Thursday. Signals were being flashed from several higher landmarks – tower blocks, church spires, hilltops.

From then on the signaling was a daily occurrence. The new powers were improving their communications infrastructure. With every day that passed Marten had to look on as they consolidated their advantage which would make it all the more difficult for him to compete with them later on.

The sixth week passed without any progress in turning his plan into reality. Rutger did not appear. Sometimes Marten began to suspect that Rutger might have abandoned, double-crossed him, but he put all thoughts of such an unholy mess, such an absolute disaster out of his mind. Rutger was a man of action, not an organizer, a planner. It must be obvious to him that he was incapable of doing anything on a large scale without Marten's brain behind it, which meant it was more or less out of the question that he would set up on his own. That he

would be so stupid as to simply blow all the money Marten very much doubted. Naturally there was always the possibility that Rutger had been robbed, or the money confiscated. Whatever the case, Marten had no choice but to wait.

His anxiety increased as he waited. Wencke's whining, fits of temper and unpleasant scenes were a further strain on his nerves and there were occasions when he, too, could not resist the temptation to drown his sorrows in drink. But he made sure he had one hot meal a day, drank tea and fruit juice and forced himself to exercise self-control, almost as if he following some ascetic practice.

It happened in week 7 AC, on Monday night. Unable to sleep — his disquiet had become serious concern — Marten was staggering round the garden when he heard a steady rumbling and the clatter of horses' hooves approaching. The previous day's edition of the Sewer Gazette had reported that Bosshard was selling 100,000 cans of liverwurst from an old Army depot to the Freak/Tech Syndicate. Bosshard's motive may have been to gain time and put off open warfare, but it could also signify a pact between or even the partial fusion of the LOP and the FT Syndicate. Marten was worried he might be overtaken by events before he had the chance to play his trump cards in the power game.

Marten stood stock-still under the pear trees, straining to see in the pitch-dark night. The sounds were approaching from a roughly southerly direction. Then the moon appeared, revealing the shapes of vehicles, horses and people heading along the canal towards the garden plots.

There was a shrill whistle such as Rutger normally gave and Marten's heart began to pound. He dashed off toward the canal bridge. His sandals thudded on the planks, but the noise didn't worry him, as no one else was living permanently in the garden plots or spending the night there. — It seemed as if, in a time when long-distance communication was impossible, people preferred to crowd even closer together in the towns and villages. — And Wencke was in the summerhouse sleeping off another session on the bottle.

'I don't believe it!' Two wagons stopped on the canal bank. There was a creak of wood and leather, the draft horses snorted,

figures jumped down from the boxes. They were closed wagons, not dissimilar to those used for circus animals. Torches blazed up, there was a mutter of voices. More figures, men and women, descended from the second wagon and gathered round Marten and Rutger. Several riders, the rearguard, dismounted and led their horses to the front of the column. Moonlight glinted on rifle barrels and axes. 'Did anyone see you?'

Rutger shook his head. 'The handover was always done in secret and we only traveled by night. I'm quite sure no one noticed anything special.' He raised his hand, then grasped Marten's arm. 'We've made it, guys,' he said, turning to the men and women. 'This is Marten Tilbert, the boss.'

Torches shone on his face. Marten assumed an expression which he hoped combined affability with authority.

'This is Dombrowitz, boss, our specialist for the animals.'

A stocky, middle-aged man stepped forward and Marten shook his hand.

'And that is ...' Marten made no effort to remember the mercenaries' names. He intended to leave them under Rutger's command. From now on he wouldn't have time to deal with minor matters.

He drew Dombrowitz to one side. 'Are the animals OK?'

'They've been a bit neglected recently, boss. But they're tough, and they come from zoos and safari parks where they were well looked after. They'll need a short time to settle in, then we can start the training.'

'Excellent. Tomorrow we'll make arrangements to recruit suitable riders. Marten climbed onto the front mudguard of the first panel truck and peered inside through a window reinforced with wire netting. He was staring into the cold, pale, boot-button eye of an ostrich.

The African ostrich (*struthio camelus*), Marten had read in an encyclopedia, is a long-necked, long-legged, flightless bird that lives in the savannas, steppes and semi-deserts to the south of the Sahara. Up to eight foot tall and often weighing over three hundred pounds, they can reach speeds of forty mile per hour. The ostrich has a small head, but its powerfully muscled legs can kill a person with a single kick. It lives in

flocks (sometimes large ones of up to 600). It mainly feeds on leaves, fruits and some small animals. It can live up to thirty years, sixty in captivity.

That was when Marten Tilbert had had his brilliant idea.

'How many have we got?' he asked as a couple of mercenaries opened the trucks and let the ostriches out, first of all pulling hoods over their eyes, as if they were falcons. Other mercenaries led them into the garden plot. A third group had already started making a pen with fence posts and a fourth mounted guard. In the initial stage the garden plots were to be their operational base.

'Sixteen, boss.'

Sixteen ostriches. In the near future a postal service could be set up between sixteen cities. For riders he needed lightweight adolescents between ten and sixteen and that was what he intended to recruit. There wouldn't be any problem. In the town he had seen how they were bored out of their skulls with no videos, computer games, TV, stereo systems or mopeds and just hung around, chewing their fingernails or beating each other up. And he could offer them excitement, privileges and good pay. When they were older they could take up other posts in his organization. He would turn them into an elite who would stand by him, come what may, because he'd look after them so well they'd think it was Christmas every day. The general public, ignored since the Catastrophe as far as communications were concerned, would be willing to shell out to be able to send letters to their far-off loved ones again. It was natural that the new postal service would be more expensive than the Federal Post had been, but Marten definitely intended to make his prices affordable. In this case it was quantity that counted. It secured the business and it could only increase his popularity into the bargain. And the ostriches would breed ...

And the mercenaries would come down hard on anyone who attacked his couriers. Very hard. They must begin as they meant to go on. He rubbed his hands in satisfaction.

'Woz goin' on?' Wencke came tottering over the canal bridge. Puffy eyed, she stared at the ostriches the mercenaries were leading past her. 'Wozzat?' She clung on to the railings.

Marten smiled. 'The future. This is where the future begins.'

'Don't believe it.' Wencke came right up to him, peered at his face. 'Why'd you not tell me?'

'Because I know you've been carrying on with that shit Bosshard for months. And because Bosshard would have had me liquidated had he heard of my plan.' Marten's smile froze. 'He mustn't find out now, either. I'm going to have the whole area cordoned off. No outsider must get wind of it before the training's complete.'

Wencke rubbed her eyes. She still didn't understand what was going on. 'Training ... ?'

Rutger, on the other hand, understood Marten as if he could read his thoughts. 'What d'you want us to do with her, boss?' he asked.

Marten hesitated. He could duck out of the responsibility, leave the decision to Rutger. Rutger would know what he had to do. But Marten Tilbert had read his Heinlein. He rid himself once and for all of his humane instincts and adopted the manly virtues. When the right thing had to be done a man could not shirk responsibility. 'Do you know,' he said to Wencke, 'lately the statistics have been saying that telephone engineers tend to hang themselves. You will be no exception.'

Rutger waved some mercenaries over. After a brief tussle they dragged Wencke over to the trees along the now overgrown freeway.

Marten went into the summerhouse with Rutger and tore open a bottle of champagne he'd kept hidden specially for that day. 'I'm afraid it's not chilled,' he said as they clinked glasses, 'but, boy, are things going to hot up here in the near future.'

Habemus papam

HELMUTH W. MOMMERS

Translated by Mike Mitchell



Helmuth W. Mommers, born in Vienna in 1943, was as writer, illustrator, translator, literary agent and editor of groundbreaking science fiction anthologies one of the first allrounders of the German science fiction scene. After a break of 36 years and a successful business career he returned to his old passion as one of the co-founders of Nova, editor of the renowned anthology series Visionen and author of more than thirty new short stories, some of them

'Our aim is, with God's help, to transform the earth, and then the rest of the universe, into one huge sacristy.'

(Pope Pius XIV)

'... and once more the whole of Roman Catholic Christendom is looking up in hope to the heavens, fervently awaiting the glad tidings that a new pope has been elected. And as so often in these troubled days since the Holy Father Benedict XVII was called to the Almighty, to the Creator of the universe, to the Trinity of Father, Son and Holy Ghost, since the one hundred and seventy-nine members of the College of Cardinals gathered here in the Vatican ... for the twenty-eighth time our hearts are filled with concern that black smoke, not white, will rise from the chimney. In this moment tens of thousands of the faithful here in St Peter's Square, hundreds of millions all round the world and countless millions of souls, human and non-human, among the distant stars are following what may well be the most significant election in the nearly three thousand years of the Church's history. And all are praying the Lord will inspire the College and they will decide on a new spiritual leader ...'

The reporter's last words were swallowed up in a general muttering which he tried to drown out with a hysterical 'Smoke! I can see ...', immediately followed by an exclamation of disappointment and the words, 'black smoke.'

He swallowed audibly, then went on, 'Another day, listeners and viewers, and another cross to bear. But we must not give way to despair, we must put our trust in Divine Providence,

which will guide the cardinals to a wise decision. We must see what tomorrow will bring, in the morning, or in the afternoon. And if not tomorrow, then the day after tomorrow or some other day.'

At this point the reporter's worried tones gave way to a brash outburst: 'UNN — always there with the latest news, pictures and background reports. Stay with us. For those who have been unable to join us before, there is a brief summary of events since the death of the Holy Father, immediately followed at 8.15 by a round-table discussion. Tonight's subject is: 'Does God have physical form?' We want to hear what you think. With that I hand over to Cossita O'Leary. Merkurius Mannheimer in the Vatican.'

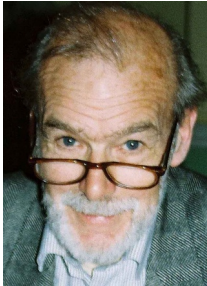
October 14 2866. Pope Benedict XVII, born in 2687 as Fernão Alvares da Silvas in a favela of São Paulo, USSA, died, after a short but painful illness, of a brain tumor which even the latest nanomedicine was unable to cure. Unlike ordinary mortals there was no question of a personality transfer to an electronic medium. His mortal remains could have survived another hundred years, thanks to organ clonation. Humbly he obeyed the Lord's call.

The Papal courier service swiftly carried the news of his death to the most distant corners of human habitation, as well as to other worlds that had been converted. All the cardinals, whether entitled to vote or not, were summoned immediately to Terra — unless prevented by illness — to attend the nine days of requiem masses for His Holiness followed by his entombment in the Basilica. Suitable lodgings were provided within the Vatican in the Domus Sanctae Martha, special attention being paid to the needs of extraterrestrial members of the College. At the same time The Sixtine Chapel, where the election was to take place, was fitted out with all necessary life support equipment and a team of doctors from the Sector General Hospital¹ was put on call.

Before the two weeks allowed for travel were up, all one hundred and eighty-one cardinals entitled to vote had arrived — apart from two whose physical condition did not permit a

collected in his book Sex, Love, Cyberspace. He was repeatedly nominated for the Kurd Lasswitz Preis and the Deutsche Science Fiction Preis (German Science Fiction Award) and received a Kurd Lasswitz Preis in the special category for his engagement for German science fiction stories. Translations of his stories have been published in the USA, Japan, France, Italy, Spain, Croatia, Greece and Russia.

1 • A bow in the direction of James White's Sector General series.



Mike Mitchell, best known as a translator of classic and contemporary German literature to English, was for many years an academic with a special interest in Austrian literature and culture, before he became a freelance literary translator in 1995. He has published ninety-nine translations from German and French, including Gustav Meyrink's five novels and *The Delalus Book of Austrian Fantasy*. His translation of Rosendorfer's *Letters Back to Ancient China* won the 1998 Schlegel-Tieck Translation Prize. The translations that he generously permitted us to republish in this InterNova issue are from Franz Rottensteiner's *The Black Mirror and Other Stories: An Anthology of Science Fiction from Germany and Austria* (Wesleyan University Press, 2008), his only foray into science fiction.

transfer via Stargate. There were a further twenty-three whose senile dementia precluded them from voting. They were allotted the honorable task of praying to the Holy Ghost to grant their brothers the necessary enlightenment.

By this time the pontifex maximus of the Universal Holy Roman Church was lying in state in the Vatican Basilica. Every day thousands upon thousands of the faithful came to view the embalmed corpse, following which they visited the multimedia show in the Holocrypt in order to see His Holiness at work again, almost as he was in the flesh.

More than anyone else, Pontifex Maximus Benedict XVII had been responsible for the reform of the Apostolic Church. The following brief review will illustrate this:

During the time of his predecessor, Pope Pius XIV, humanity had already started to set up colonies in adjacent parts of the universe and to send missions to alien civilizations, in the spirit of the universal teaching of a universal church. In those years the sole vehicles available were spaceships which traveled the immense distances with a combination of conventional drive units and hyperspace transfers. These spaceships were driven by robots, so humanity's first ambassadors were robots, both the diplomats and the missionaries, ministering spirits, so to speak. Androids in the likeness of man. And therefore of God.

Although these distant bastions of the one true faith made it necessary to appoint cardinals from among the settlers, adaptants, hominids and aliens, a codex to canon law denied them the right to take part in the election of the pope. They could never have reached the Vatican, or any other appointed place, in time to participate in elections. And they were held in conditions of strictest secrecy, which naturally ruled out voting over the hyperspace communications network. That seemed to have solved the problem of an alien one day appearing as a candidate. Until – well, until stargates were developed.

This technology arrived too late for the election of the successor to Pius XIV. It was Pope Benedict XVII who made a revolutionary decision in his new Apostolic Constitution, *Universis Dominici Gregis*, of 2780 which reflected the universal charac-

ter of the Church. By virtue of his office, which gives the pope the power, taking account of the way times have changed, to determine the manner in which his successor is appointed, he decreed that in future the College of Cardinals should consist of cardinals from all the worlds, all races and all life forms. Nothing, he declared, could better express the universal character of the Church.

There had already been women priests for centuries — and women bishops and cardinals. Settlers in other worlds, so-called adaptants, had adapted to the physical conditions obtaining there, but had not for that lost their humanity. And aliens, once converted, baptized and welcomed into the flock, were their equal in every way. Were they not all children of God?

That left the question of beings with artificial intelligence. As early as the twenty-second century they had been granted human rights, but the Roman Catholic Church had problems accepting they had souls. Only decades later, after they had been deployed as servers, preachers and missionaries, were they granted the grace of possessing souls. From that point on they carried the message of the One Universal Church to the most inhospitable regions of the universe.

So they, too, were God's creatures. After all, what was there to distinguish them from cyborgs, artificial creatures imprinted with the personality patterns of people who had died — whose souls God had ipso facto not yet called to His bosom?

Thus it was thanks to His Holiness Pope Benedict XVII that all forms of intelligence — human or non-human, organic or mechanical — became potential candidates for election as Bishop of Rome.

It was not surprising that this aroused strong disagreement among the clerisy and heated reactions from some of the laity. It would be an outrage, was the popular view, if an alien were to be elected the new pope. And as for a robot — the very idea! It would be bad enough if it was the first Popess wearing the tiara.

That was the general opinion wherever humans had settled, in contrast to those star worlds which had converted to Catholi-

cism in the firm belief that the Son of God had only taken on the form of Jesus Christ to beg the grace of forgiveness symbolically for all beings. Who could blame them if they wanted God the Father, His Son and the Holy Ghost for their own?

But emotions, political or economic considerations, pressure from the media and personal likes or dislikes had no place in the venerable institution of the Conclave. In making their choice all the cardinals were guided solely by the thought of God and concern for the welfare of the souls in their care.

How difficult this was could be seen from the black smoke coming out of the chimney for the twenty-eighth time.

The praying became even more fervent – inside and outside.

'Now you can put your questions to our panel of experts,' the presenter announced in genial tones. 'All our communication networks are open and fully integrated, ready for your call.' He beamed expectantly. 'Off we go, then. Who's first?'

VIEWER: 'What will happen if a pope still hasn't been chosen after the next two rounds?'

EXPERT: 'The cardinals will discuss the general principles of the election and decide how to proceed. For example, whether to stick to a two-thirds majority or go for a simple majority.'

VIEWER: 'What happens if there's a tie?'

EXPERT: 'A tie is impossible. There are a hundred and seventy-nine cardinals present entitled to vote. Abstentions are not allowed.'

VIEWER: 'Does that mean our cardinals could be outvoted?'

PRESENTER: 'What do you mean?'

VIEWER: 'Well, couldn't the others gang up on ours, flex their muscles a bit? After all, they're in the majority.'

PRESENTER: 'Just to make things clear for our viewers: there are eighty-nine men, thirty-two women, fifty-four aliens and four robots, a hundred and seventy-nine possible candidates in all.'

EXPERT: ' „Flex their muscles” is hardly an appropriate expression for the College of Cardinals and to „gang up” would be close so simony – coming to an arrangement – a crime punishable by excommunication.'

VIEWER: 'What if a cardinal dies — I mean during the election? Or falls ill?'

EXPERT: 'A death is extremely unlikely. And cardinals can still vote if they're ill. At the moment three cardinals — so-called infirmarii — are in hospital. In separate rooms, of course. An assistant collects their votes ...'

PRESENTER: 'I have a question that is frequently asked. Does the Church expect a increase in numbers among non-hominids if an alien is elected pope?'

EXPERT: 'Political considerations must not influence the election.'

VIEWER: 'A supplementary question: Isn't sending missionaries to alien beings a matter of politics?'

EXPERT: 'It is done to the greater glory of God. And for no other reason.'

VIEWER: 'Another supplementary: What about the bloody conversion of Xenidom, then? Tens of thousands —'

PRESENTER: 'I think this is not the time, nor the place to go into that unfortunate episode. There has already been sufficient ... and anyway, it happened two hundred years ago ... Today's topic is the papal election.'

VIEWER: 'Why are we never informed about the voting?'

EXPERT: 'The answer is quite simple. It is a secret ballot. The procedure is as follows:

After the voting slips have been publicly counted, they are attached along a piece of string, the ends of which are knotted, and the bundle is placed in a casket. As soon as the election process has produced a result, the voting slips for all the ballots are burnt. It is a tradition going back over a thousand years.'

VIEWER: 'How can a fish fill out a voting slip? I find it hard to imagine ...'

EXPERT: 'The aquatic life forms of Aquarius have sonar methods of communication which a special piece of equipment can translate into written characters ... and folding the slip twice and dropping it into the urn is done by a servo system. You can see how it works in this piece of film —'

A holocube appeared on the viewers' screen showing a survival tank filled with water in which there was a shimmering,

fishlike being, no less grotesque in its shape than the creatures inhabiting earthly waters. It looked at the camera and seemed to speak. Its fish mouth moved in time with its gills.

PRESENTER: 'That is the Aquarian ambassador, His Excellency Wua-hu-ua, at a meeting of the Universal Worlds Organization. He is addressing the general assembly by means of his trumpet crest. The mouth is solely used to take in food, which is done constantly.'

VIEWER: 'What about written records. With the results of the individual ballots?'

EXPERT: 'They are placed in a sealed envelope, which is handed to the new pope. There are no other written records. Taking notes or any kind of record is forbidden. No instruments or technical devices for that purpose are allowed.'

PRESENTER: 'What you must know is that the Sistine Chapel is hermetically sealed off from the outside world. It is protected against any kind of bugging. Internally and externally. They are completely incommunicado.'

VIEWER: 'What about the ... er ... robots? The androids? I mean what about RO 2314 – Cardinal Jean Baptiste – and the other three? They don't need notes to remember everything. Do you call that incom ... incomado? They remember everything!'

EXPERT: 'My friend, you are underestimating the wisdom and honesty of the Catholic Church. These candidates have, of course, loaded a program which deletes, with an appropriate time delay, all data relating to the results. Even among us humans there are people with remarkable memory capacity, not to mention aliens. They are all instructed as far as possible to delete this information from their memories. – Does that answer your question?'

VIEWER: 'Yeah ... well, I dunno ... When I think about it ... a robot ... I mean, it's fine to see these things working where humans can't get to or it's too dangerous, they're really useful ... but as pope? Do we really need that?'

PRESENTER: 'These „things" as you call them have human rights – have had them for ages! And souls! Please show some restraint – and some respect. One of them might be our spiritual leader one day ...'

VIEWER: 'God forbid!'

PRESENTER: 'And to the next question. And what can it be but the question everyone's been asking for weeks: who are the favorites? Here are the latest results of an opinion poll.'

Again holocubes appeared, three this time, presenting the leading candidates with pictures taken earlier. Over their heads in all three cubes furiously rotating columns of figures showed the latest result of the survey.

Cardinal Lucius DiMaggio had a clear lead. As if he knew, when the picture was taken some years previously, that it would be shown to billions of paying customers during the next papal election, his round face was positively glowing with an expression of understanding and deep humility, as if he had just seen God. As always, his head was tilted back, on the folds of fat round his neck, so that he appeared to be looking up to the heavens. The ring of silver hair round his bald pate shone like a halo in the spotlight. His hands were not crossed over his breast in the folds of his sleeves but held out a little to either side, as if he were receiving a blessing from on high — or welcoming his flock from all over the worlds.

What a man! A worthy successor to St Peter on earth and in the starry firmament.

Compared with him the other two cardinals paled — almost literally. The one in second place was a dignified man of God with an earnest expression, who already seemed to have passed the summit of his career. The third was an adaptant hominid from one of those superheavy planets in which people didn't ask how tall someone was, but how wide. But just a minute! The projected image faded and for fractions of a second disappeared behind a reptilian being in crimson robes, Cardinal Rarr'Arr-Sstiss'Iss (which means 'Rarr with the third eye'), from Dinoptia, the third planet of the sun Altair. He represented the most numerous alien race.

Among the also-rans was a further alien, a four-armed Cerberan, not dissimilar to humans, and a former Miss Galaxy who had changed from a frail sister to a Mother Theresa, swapping her frilly lingerie for the habit. Among hominids she was still very marketable as an advertising icon.

'You mustn't forget this is purely a survey among our audience, it is in no way representative of opinion among the clergy. It's more of a ... erm ... popularity rating,' the presenter hastened to add. He made a point of leaving the mini portrait of the female candidate showing a little longer. 'Right then. Have there been any further questions in the meantime?' He consulted a screen.

'Ah, a lady for a change — at least, I assume I'm right ...' The presenter appeared to be visited by sudden doubts. In recent times a person's sex had not always been immediately evident, emancipation having blurred the differences.

'You are quite correct,' came the somewhat tart reply. 'A woman, a she if you've no objection. Like the Maid of Orleans. Female, even if it's not that obvious.'

'Yes, yes, of course,' he said, furious with himself at his faux pas. 'Your question is?'

'Why do you always talk of cardinals as men? Conveniently forgetting some of them are women. And why do you all behave as if Pope Joan² had never existed?'

PRESENTER: 'But, madam, that's just a legend. The darkest Middle Ages.'

VIEWER: 'Precisely!' There was a look of triumph on her face.

EXPERT 'Pope Joan is an invention of malicious reformers. There is no documentary evidence, none at all.'

VIEWER: 'As you said: the darkest Middle Ages. Everything swept under the carpet. Erased. The documents destroyed.'

PRESENTER: 'But, madam, this is all pure supposition ...'

VIEWER: 'And what about the chair test?'

PRESENTER: 'Chair test?' A helpless look at the expert.

EXPERT: 'The sella stercoraria. A chair with a hole in the seat on which the chosen candidate had to sit so that his genitals could be examined to prove his manhood. But the procedure was abolished in the middle of the last millennium.'

VIEWER: 'So we did once have a popess! I said ...'

PRESENTER: I think we should return to the present election.' A glance at the monitor. 'Oh, this looks interesting. Can we get the caller on the line?'

2 • The story of a female pope who is supposed to have reigned between Benedict III and Nicholas I in the 850s is generally held to be a legend, invented in the 12th century by the Polish chronicler Martin of Opava. It circulated widely in the Middle Ages, but modern historians regard the story as fictitious, its origins are probably to be found in a papal satire.

'Hello.' A multifunction robot, all naked steel, no synthotegument, materialized in the projection field.

PRESENTER: 'Good afternoon. This Markus Mannheimer, UNN. Your question?'

ROBOT VIEWER: 'Why is there no robot among the top ten?'

PRESENTER: 'Why do you think there should be one?'

VIEWER: 'We are the second largest minority. If you add the so-called intelligent tools we have a clear majority.'

PRESENTER: 'What do our experts have to say?'

EXPERT: 'Well, there are differing views on that. Whether the fact that an intelligent tool is, broadly speaking, an artificial intelligence means that it has a soul is a controversial matter among theologians. The Roman Catholic Church at least makes a clear distinction. It is the same as that between beings endowed with reason and animals driven by behavior. But leaving that aside, what counts is not quantity, but quality —'

VIEWER: 'Are you saying that robots are inferior?' The steel 'face' studded with sensors did not permit any expression of emotion, but its voice had a strange modulation — and definitely sounded offended.

EXPERT: 'Of course not. Please forgive me if I have hurt your feelings ... I just meant ... It is spiritual, not material strength that counts — not the number of faithful in a species, but ...'

PRESENTER: 'No one can deny the spiritual strength of our mechanical brethren,' he declared, springing to the aid of the faltering expert. 'They have done great things. You only have to think of Bonifax ...'

'... who was canonized, and quite rightly so.' The expert grabbed the lifeline, having recovered his composure. 'Saint Boniface died a martyr's death in the uprising of the enslaved automata on Mechanistria. He preferred to be brainwashed and sent for scrap rather than renounce the faith that had guided him in his struggle for liberation.'

VIEWER: 'Jean-Paul Baptiste is no less a being.'

PRESENTER: 'Yes indeed. I think this is the moment to show, for all our mechanical and electronic co-religionists, a brief portrait of that charismatic preacher.'

A man with flowing locks and beard appeared in the holocube, one hand outstretched, the other holding a Bible. His appearance and posture recalled the image of Moses on Mount Sinai with the Tables of stone as seen by painters in the olden days.

Constructed during the pontificate of Pius XIV, he had spent over two hundred years traveling from planet to planet in the early period of exploration, spreading the word of God. He was considered the most important preacher since Abraham a Sancta Clara³; in recognition of his services Pope Benedict XVII had made him first a bishop, then a cardinal.

PRESENTER: 'With that we return to your questions ...'

'You are tuned in to UNN. This is Markus Mannheimer. It is November 1st in the year of our Lord 2866. The sky over the Holy City is a resplendent blue — let us hope that is a good omen.

'It feels as if the decision is in the air, there's a real crackle of tension. The thousands of the faithful here in St Peter's Square must have sensed it as well. Instead of going home for the night, most of them stayed here — many engrossed in prayer or singing devout hymns — so as not to miss the great moment when the new pope is elected.

'After the twenty-ninth and thirtieth ballots were inconclusive we can only hope that the College of Cardinals has decided on a new procedure: election by a simple majority. They have the right to do that after thirty ballots, but of course we cannot know for certain that they have taken this ... yes, this drastic course.

'But times change and procedures must change with them. We are at a turning point in the history of the Church, the first time a non-human has been a candidate. And — ladies forgive me — also, I hasten to add, a female of the human race.

'What is likely to happen?

'Assuming all our prayers are answered, in roughly an hour's time white smoke will come out of the chimney. That will, of course, mean that a new pope has been elected and that he — or, of course, she or it — has accepted. Then the new pope is asked what name he intends to assume. After the cardinals

3 • *Abraham a Sancta Clara (1644-1709), real name Johann Ulrich Megerle or Megerlin, was a famous Catholic imperial court preacher in Vienna during the time of the wars against the Turks, noted for the homeliness of his language and his ability to appeal to all strata of society, lashing low and high people alike.*

have pledged their obedience and a prayer of thanks has been said, the senior cardinal deacon announces — with the words *Habemus papam* — the name of the new pope to the waiting multitude. The latter will then appear on the balcony of St Peter's and deliver his apostolic blessing *urbi et orbi et universi*.

'Which means „to the city and to the world and to the universe“'

'Yes viewers — all over the world and all over the universe — the decisive moment is at hand. From the clock I can see that the ballot must already have taken place. Do we have a new pope — or a popess ... or of whatever sex — you can never really tell with aliens — Is that smoke I can see? Or is it just an optical illusion, a mira—

'Yes, yes! It is smoke — white smoke! I can see it quite clearly, white smoke. We have a new pope! A popess — whatever.

'You must excuse me, I have to shout to be heard above the crowd. Everyone's going wild with excitement, it's an eruption of relief, unbridled jubilation ...

'And now someone's come onto the balcony. Is that the new pope? — No, of course not. He's going to tell us who's won ... er, who's been elected.

'The uproar in the crowd is dying down as a reverent silence spreads over the square. I'll have to speak more quietly now, I hope you can hear — just turn up the sound. I'm almost whispering. Is that OK?

'Well now you'll be able to hear it for yourselves. The cardinal deacon is stepping forward, a witness on either side, he's unrolling a scroll ...'

'*Habemus papam.*'

'Thunderous applause. What a sight. Christendom is going wild. — You'll have to switch the sound down or your ear drums — or whatever — will burst.

'Ah, look, there is some movement among the cardinals. Soon the new pope will step out onto the balcony. Which of these resplendent figures will we see? Is that a gleam, like something in a water tank? Or like scales ... or a bald head? I can't quite see. Where's the telescope, dammit?

'The crowd has frozen. Absolute silence for the cardinal deacon to announce the name of the new pontifex maximus.'

'John Paul III.'

'Who can it be? Not a woman, that much is certain. But just a minute, isn't it obvious. Or have I got it completely wrong?

'Yes, yes — what a brilliant compromise. What a wise decision! Nothing could better express the universal character of the Holy Apostolic Church than this choice. The pope is infallible, isn't he? But to err is human. Did not God the Creator give us humans and all other beings the gift of developing his creation? Who better, then, to guide us on His unfathomable ways over the coming centuries than ...

'... Jean-Paul Baptiste!

'But ... but ... that's not ... or is it? Is he setting an example? Of universal equality and brotherhood? Independent of phenotype?

'Oh, look, he's even removed his human integument!'

Excerpt from the Annals of Church History 3900 AD

Pope John Paul III, original name Jean-Paul Baptiste, number 2X-550502-Z of the RO-2314 series, produced by Universal Robotics on Luna in 2577, was elected pope on 11.1.2866. His pontificate, which lasted until 8.8.3042, when he fell victim to a system crash, was one of the longest and most productive. Better than anyone before him, he succeeded in integrating alien religions and was responsible for the New Apostolic Constitution, according to which a hominid, a robot and an alien take the office of spiritual leader of the Universal Catholic Church in turn. He was sanctified by Pope Rra'Kkorra Innocence I in 3128.

Enola Forever

THOMAS A. SIEBER

Translated by Michael K. Iwoleit

PROLOG

On Enola's last evening, as the west wind blows from the glazed craters left by thermonuclear blasts and dusk colors the grayness of the nuclear winter with a trace of pink, the Tardy Jon lies in front of his workshop and bleakly beholds the land that surrounds him. To the south, behind Mel's Roadhouse, he can see the destroyed shopping malls and military installations of the corpocracy, drifting like deserted islands in an ocean of Chinese soy fields. A cratered road, patiently gnawed at its edges by proliferous vegetation for more than a century, meanders through the fields towards him, passing immediately below the disused railroad embankment on which Jon's garage is located. A little further up the Befirczik, as the road is called, passes a cluster of oddly shaped cardboard and corrugated iron shacks, followed by some rundown villas with swimming pools full of croaking frogs. Beyond them the road leaves the village and disappears into the distance among gloomy hills and black forests.

On his right is the god-forsaken plain that has once been Francofort-Alamein. Sparse vegetation carves out a miserable existence here between black ponds and areas of extensive glazing. At night the wailing of unnamed creatures can be heard that leave tracks like human handprints in the mud. There are neither roads nor trails in this area and no wanderer who has his head on straight would dare to enter it. Only the sun, hidden behind veils of dust, feebly sinks down to the horizon here in the evening, as if swallowed up by the colorless wasteland.



Thomas A. Sieber was born in Gelnhausen, Hesse, in 1967 and works as a research physicist, among others at CERN. He began writing in the late 1980s and has published short stories in anthologies and magazines such as Nova and phantastisch! In 2015 he became closer involved with Inter-Nova's sister magazine Nova and joined the editorial team as its nonfiction editor that he remained until 2023. A selection of his best short stories is planned to be published later this year in the book series Cutting Edge, edited by Michael K. Iwoleit, an

*imprint of InterNova's
host publisher
p.machinery.*



Translator Michael K. Iwoleit was born in Düsseldorf in 1962 and lives in Wuppertal today. He was educated as a lab assistant and studied philosophy, sociology and German philology. Since 1989 he is a freelance writer, translator, editor and critic mostly in the science fiction field. Apart from his literary activities he has also worked as a copywriter for advertising and IT industry. He is the founder and editor of InterNova and was the co-founder and long-term fiction editor of its German sister magazine Nova.

Faced with this somber scenery Jon lets his head drop sideways and peers at Enola. Through half-closed lids he watches her as she cooks and cleans the house and soon after shows up to work in the garden and when she's finished with that she begins to neatly line up all the battered cars, gliders and scooters that stand about higgledy-piggledy in front of the workshop. And after all that is done she approaches him with a smile, kisses him, sits down on the grass next to his lounge and puts her head in his lap.

„It's good," Jon thinks, „that I have Enola," and this is all that he thinks, nothing else.

This is how they sit for some time while daylight recedes and solitary drivers that pass by along the Befirczik gawk up to them. Jon is in a state of complete inner balance when something stirs up a thought in a remote corner of his brain that takes shape within fractions of a second and hits his indolence like a thunderbolt. A painful moan escapes his chest. Without opening his eyes he says to Enola:

„Baby, there's another broken hover down at the road ... it's owned by Lax."

Enola raises her head to look at him.

„The g-box is done for. Lax wanted to come by and pick it up today ... damn it," he babbles in a tone of voice that reveals his growing panic. Jon knows that to forget a job for Sam Laxdal is like forgetting to breath.

He stared dead ahead until Enola finally says: „Okay, I have a look at it."

She raises in an elegant movement and is on her way down to the road. Halfway between, when she can see the hover, she stops and calls back up to Jon: „Interesting, one of the unbreakable 28ers."

„Yes," Jon mumbles, „unbreakable ..."

„... and constructed for eternity," completes Enola the sentence from a distance of hundred steps. Then she covers the rest of the way with a single boisterous leap.

The hover that usually floats two feet above ground sticks to the tarmac as if it had just smashed down from the sky. Enola opens the hatch that covers the g-box and knows imme-

diately that nothing can be done down here on the road. She walks back to the workshop to fetch an external gravity compensator. Coupling it to the hover she manages to maneuver the vehicle up to the workshop. She immediately begins to remove the stasis field inductor, the central part of all g-boxes.

„Don't worry" she calls over to Jon, „we'll get it fixed again."

„As long as you hurry," Jon replies and stares uncomfortably over the tip of his shoes into the darkness.

Car wrecks are lined up along the Befirczik like a traffic jam in the realm of the dead, the skeletons of their previous owners lolling about worn out cushions and seat shells. Enola and Jon use the wrecks as sources of required spare parts. Enola flings the bones into the fields and tugs the vehicle with the tractor to the garage where it is cannibalized. Since there are thousands of wrecks for each running vehicle Enola usually has no problem to find a fitting part for even the most unusual model.

Laxdal's hover, however, is an exception to the rule. There are actually no damaged 28ers because of the nunno which – like everything that is more complicated than a bike – was invented before the war and is meant to regenerate any conceivable damage on its own, provided that its a nunno from the prewar production, not a rip-off from the Chinese Union. Laxdal's 28er is apparently infected with the latter and thus Enola begins to remove the corrupted components with surgical precision to replace them with healthy material.

To do so and to reach the stasis field she has to crawl so deep into the narrow opening of the drive unit that her whole upper body disappears into the hover at the end. As she opens the superconducting cover she realizes that two of the six projection coils are completely destroyed. The field flickers out unrestricted at these spots and almost reaches as far as the passenger compartment. Had Sam Laxdal and his gorillas known that the icy hell of the stasis had been reaching out its fingers behind them, they probably would have jumped out of the moving hover. Enola laughs at this thought. Then Laxdal's eyes as he stares at her come into her mind and what he might do to Jon if the hover doesn't run, so she hurries to proceed.

Enola's work as a mechanic has earned her a legendary reputation along the Befirczik. The same is true of her beauty which is the reason why drivers below the railroad embankment crane their necks for her and sometimes severely crash into each other – or appear in the workshop with flimsy excuses and hang around until Enola kicks them out.

Jon, who is not much interested in beauties of whatever kind, hangs around on his lounge with a determination that could be of philosophical significance if his laziness wouldn't be just as proverbial as Enola's aloofness within a radius of hundred ghalvas.

Apart from substandard nunno Lexdal's hover is equipped with a number of components so exclusive that even Enola doesn't know them, among them a custom-built module that keeps the hover from being shut down by a so-called schempp, a device used by the Volunteer Squads for hunting criminals. Enola uses it to block vehicles for as long as she crawls around their innards.

As Enola inserts the second coil her schempp is deactivated which causes both the g-box and the horizontal drive of the 28er to start up within the fraction of a second. The hover lunges upwards so fast that even Enola's superhuman reaction capacity can't keep her head from being engulfed by the black swirling of the stasis field up to her shoulders. Her hands cramp around the drive shaft that starts to rotate and pulls in her arms until it jams and gets stuck with a crunching noise. The control unit shuts off the drive only now – and then it fails. The vehicle sags and Enola's feet touch the ground again.

Nothing of all this enters her mind anymore. With her upper body unalterably stuck in the hover's innards, her head is outside of the universe. Her mind lingers in the depth of the temporal singularity of the stasis.

Time has stopped to pass for Enola.

Jon wakes up as a rude kick shakes his lounge. He opens his eyes to look up into an infuriated face: black mustache, bald head and sunglasses at night ... Sam Laxdal!

„Finished ... of course,” it slips out of Jon's mouth reflexively even though the other man hasn't said anything yet.

„I hope so!” Laxdal superfluously kicks the lounge one more time.

„We have already been wondering where you are.” Jon's brain is slowly starting to work. He collects his skinny bones, gets up and starts walking towards the workshop. Laxdal, a short, stout man, passes him and stomps ahead with vigorous gaits.

As they enter the hall, he notices much to his sorrow that Enola still seems to be working on the hover. Strangely she neither replies to Jon's questions nor shows any reaction to Laxdal's increasingly louder yelling. The hatch where she is stuck is too narrow to let them have a look into the inside. So they helplessly go around in a circuit and pat on the shell here and there.

As some time has passed without any significance change of the situation they try to pull Enola out of the hover. Each one grabs a leg and pulls as hard as he can but the only result is that Enola's coverall is torn apart with a harsh noise and they both sprawl like slapstick characters on their backs, each one with a pant leg in his hands.

While they stand up cursing and dust down themselves, Laxdal's eyes get caught by Enola's lower body that protrudes from the hover, only clad with a pair of socks now.

For a while they just stand like stuffed dummies, not saying a word.

Laxdal swallows.

„Listen, Jon, old chap,” he finally says. „I just had an idea how we could make a deal regarding the hover.”

Jon's workshop is closed a few days later and it's not long before his repair business is completely discontinued. Who, so his explanation, should carry out the repairs now?

Visitors appear that neither bring nor pick up vehicles. They hang about the railroad embankment instead before they disappear, alone and sometimes in groups, into the workshop. While they come from the proximity in the beginning, the draw area

extends in the same amount as the secretiveness is decreasing. Soon it's an open secret from Grubmar in the west over to G-Town which kind of service is offered in Jon's garage lately.

Jon, who has pondered the whole matter in his current situation, has come to the conclusion that what he does is morally justifiable. Enola can no longer be regarded as a sentient individual. Her brain has probably been irreparably damaged – you could call her dead. Apart from that he tends to listen to Sam Laxdal in this matter who unswervingly claims that Enola has been constructed exactly for this purpose before the war ...

So Jon spruces up his workshop and lets it shine in the light of red floodlights. The following words glow brightly in large letters above the entrance:

ALONE WITH ENOLA

The shed is later replaced with a house of the most elegant building style, then with a palace and finally, shortly before Jon's death, with an ancient Roman style thermal bath in the center of which Enola and the 28er are placed under a grand marble dome.

1. Aetas Hominis

The robot named Enola and the hover of the type BARQ28 remained in possession of Jon's family for eight generations. The Tardy Jon was succeeded by the Shady Ron and the latter by Dumb Don and his twin sons Tim and Tom. The Pale Tim died without children but Tom the Obscene had a son who went down into the family chronicle as the Generous Ned. Ned's son was Carlos the Prudent One who for his whole life denied to be the father of his offspring, the Reckless Uth, but finally couldn't help but to bequeath him the substantial family assets as well as Enola and the 28er.

The Tardy Jon's dynasty finally came to an end with Uth's son, the Unfortunate Rhett, because around this time most in-

habitants of the village and the surrounding areas or rather of the whole country died violently due to the invading hordes of Jaunzer Hedronax who had left his ancestral homeland at the edge of the Pyrenees and started a bloody conquest of the European continent.

If Genghis Khan could have seen the Jaunzer's atrocities he would have put his hands over his face, for Hedronax was the kind of men who ate the legs of infants like baloneys. He pulled a bloody trail across whole Europe and as he turned his aspiration and his armies towards Asia he met with little resistance there either.

The Russian winter had stopped many a conqueror but Hedronax overcame it by burning woods and houses, animals and humans so that his troops could warm themselves by the fires and eat the charred meat. The few who dared to oppose him were swept away by the ferocity of his visage.

It was not before he reached the gates of Irkutsk that an alliance of Kalmyks, Oirats, Tobol Tatars and the remnants of the Chinese Union's forces managed to wrest a truce from him at terrible costs of life. Hedronax was still the undisputed ruler of the old world. And since Africa was almost completely depopulated, the American continent had disintegrated into hundreds of quarreling tribal territories and Australia and Neo Caledon had isolated themselves from the rest of the world, no one could keep him from letting Pope Innocent XVIII crown him humanity's first Super Tsar – an event that was honored by erecting a four-sided pyramid made of ten million skulls, seventy meters long and thirty meters high, at the gates of the city. The year was 2378 Anno Domini.

As Hedronax was on his way back to the town of his birth, Argeles-sur-Mer, after this dreadful beet harvest, he traveled via the old Befirczik and passed Jon's thermal bath on this occasion. He took a fancy of the site and of Enola, seized the thermal bath and stayed on for an extensive period of time.

A veil of silence may be cast over what Hedronax did to Enola, for the Jaunzer was a cruel man in all respects. But while he was (to tell the truth) a rather courageous man he

still didn't dare to approach the stasis field so that considerable parts of Enola's anatomy were not available for his cruelty. He became increasingly furious about it and finally, as could be expected from a tyrant, he grew tired of Enola and decided to get rid of her.

Hedronax' concubines usually had a rocky road ahead of them in such cases that lead via dignitaries, officers and foot soldiers finally into the kennels of the hunting dogs. Since this career was not an option for Enola and Hedronax was aware of her resilience against stabbing and thrusting weapons he decided to blow her up. The leather covered ivory stool that he had placed next to the hover (the Super Tsar was small in physique) was removed and several sticks of dynamite attached between Enola and the vehicle body.

A huge crater yawned next to the hover after the explosion. Nothing was to be seen of Enola anymore and Hedronax went contently to bed, to embark on his journey home the next day. Since the Jaunzer had neglected the sciences his whole life in favor of an excessive dealing with weapons his knowledge of self-reproducing nano robots could be justly regarded as limited. He was thus quite astonished to see Enola's backside sticking out of the 28er's hatch completely unharmed the next morning.

He was even more surprised, however, as the dagger of his confidant, the future Jaunzer Arginatz (whose deviousness and unscrupulousness he had always appreciated), penetrated his back and pierced through his heart – a murder that was committed, as they say, in equal parts out of envy and thirst for power.

Arginatz had no desire to return to Argeles, so he stayed here and turned Jon's thermal bath into the center of his empire. From here he reigned for thirty years and it was rumored that the aged Pope Innocent had married him and Enola one night as part of a ceremony that was highly unusual for Catholics.

The Eurasian Empire founded by Hedronax was to endure for almost thousand years. Since the Jaunzers didn't show any inclination to foster art and science, a dark age descended.

Australian researchers who sometimes payed a visit to the old world seemed like aliens to the common people and the Jaunzers let them be battered and pelted with whatever they could deploy.

Apart from a lamentable number of other things the knowledge of stasis fields and the nunno and especially artificial life forms got completely lost during that time. A solution of Enola's problem – would it have ever been considered at all – had already become impossible for the first generation after Arginatz.

As the thousand years of the Jaunzers came to an end, the heirs of Hedronax, having become fat and sluggish, faded into obscurity. Grofatz, the fifty-eighth Jaunzer, had his body hair removed twice each day and assigned posts in the state based on a weird quota system that favored weaklings and imbeciles. It didn't take long before younger peoples surged forward from all directions to challenge the degenerate descendants of the conquerors for their wealth and power.

A period of reordering followed that lasted further 300 years. Jon's thermal bath was in turns occupied by Irish crusaders, Scandinavian axemen and finally by a hedonistic people from the Atlas valleys, related to the Tuareg. All of these groups, as may be assumed, weren't much concerned with Enola's rescue.

The religious wars that had already led humanity to the brink of destruction in the 21st century flared up again in the mid of the 4th millennium. Jon's thermal bath was again overrun in turns from all points of the compass. The Disciples of Yann, a sect from the depth of the Carpathians, came first, followed by Greek neo-communists and then by the Kazakh devotees of the Great Gilfig who in turn were expelled by the trailblazers of the Holy O, originating from the Scottish hill moors.

While the communists celebrated excessively with Enola in the center of attention, she and the 28er were covered with huge blankets during the time of the sectarians to spare the believers the shock of being confronted with her bare backside

(the rustling under the blankets at night indicated that the youths were not so repulsed). As the Holy O didn't manifest himself at the predicted time, his followers proved to be as consequential as no other religious community in history and completely disbanded. The thermal bath was left without a fight to the sect of the Half Sisters who soon removed the blankets and declared Enola their martyr and patron saint.

Around the same time the Öiv (11), a radically ecological fraternity from a swath of land close to the Elbe Sandstone Mountains, managed to locate the legendary „last laboratory“ in the Vosges. The laboratory was around the same age as Enola. It dated back to the time before the first religious wars and was equipped with an artificial intelligence that helped the fraternity to develop a 100% lethal variety of the Marburg virus fifty years later which the Australian microbiologists weren't able to counteract with a vaccine within the given time frame. The oil era was long past and the majority of the world population used sailing ships, bikes and oxcarts as means of transportation. It thus took the plague a while to spread, but once it had happened the great dying set in and this time it was complete and final.

All that was left of humanity was an Australian station on Mars – to the sorrow of its occupants not yet completely self-sustaining at that time – and a Chinese-Norwegian probe on its way to Alpha Centauri. It was meant to reach the star, orbited by a single desolate planet, 50.000 years later and it may already be revealed here that it didn't discover any noteworthy things or events.

2. Aetas Telluris

After the homo sapiens had vanished, a deep silence descended upon the world. The changes that occurred – even the passing of time itself, it seemed – had slowed down to a natural pace. The tides, the changes of day and night, the lunar phases – none of these had changed, but the pulse of life still seemed to beat calmer than before. The seasons came and went like they had done in eons, only the human being, that transitory

chronicler of a cosmic blink of the eye, had been removed from the run of events.

In autumn the cool smell of grass and wet earth that had once reminded children that it was time to go home drifted in from the fields behind the roadhouse. In summer the torrid sun parched the grass at the railroad embankment but no-one was present to long for cool water or the smell of a summer rain. And there was no music anymore (what really could be regarded as a loss) beside the sounds of water and wind and the bird songs.

The Earth gradually recovered from the wounds inflicted by humanity. Where things had been gray, new green appeared. The sky shone in the blue of bygone days. Shoals of fish returned into rivers and oceans, corals into the lagoons of the South Pacific. Isotopes decayed, greenhouse gases were chemically bonded and after the dust had settled, the stars could be seen again at night. There was only one law that life had to follow from now on: the natural struggle for survival that humanity had overcome and yet perverted.

Not a single moment passed for Enola all the while. Almost one thousand years after the last human had vanished from Earth and around the time when the inhabitants of the Mars station let go of the life that they had desperately clung to for such a long time, the marble dome of Jon's thermal bath burst and buried Enola and the 28er under its rubble.

Exactly at the spot where Enola was now awaiting her further fate a furious ruler had once in distant memory captured his runaway wife and (before he let her be hauled back into his castle in G-Town) dubbed a homestead accidentally located close by as „Loveless“. The village that had grown around it was surprisingly still called by this name thousand years later as a nuclear stray caused the south-western mountainside of the nearby Herzberg to slide and bury everything north of the railroad embankment under a huge mudflow. Even in Jon's times the event had been a century in the past and on the mud plain that was on the same height as the rail line hundred year old oak tress had grown to a sparse wood. They fiddled

about the depth and darkness with their roots, between houses and vehicles and the bones of Jon's ancestors.

Thanks to their regenerative capacity Enola and the 28er survived the collapse of the dome unscathed, but an enormous weight bore down on them. Since the floor of the thermal bath was destroyed by erosion and upward striving plants, the loose quality of the ground below (in conjunction with the nunno's enormous density) caused the robot and the hover to slowly sag and approach the former ground level. After further thousand years they hit harder and slightly inclined subsoil so that they moved slowly, in geological timescales, through Loveless that has long since turned to dust.

Meanwhile Jon's thermal bath and everything else that had ever been created by man crumbled to dust. As Enola and the 28er emerged from the elongated hill that had once been the railroad embankment two million years later the face of Earth had changed. The world seemed virginal like on the first day of creation. Tigers, wolves and bears, mooses and aurochs inhabited the surrounding areas that were covered with vast birch woods. The animals gaped blankly at the white thing that emerged and many a tusk and claw tested its quality. But since they could neither move nor eat it nor utilize it for building a den they simply regarded it as a weird rock and used it as a landmark or to apply odor signatures.

Time passed. The planet changed from a world of vast veldts to a jungle world and then to an ice world. The geological transformations weren't very distinct at Enola's location. At other places, however, they were, with the passing of the Platonic years, enormous. After twenty million years East Africa had separated from the rest of the continent along the Great African Rift Valley and opened a new Ocean. The Iberian Peninsula separated from Europe. Australia and New Zealand moved northwards so that North Australia was now located at the equator. The Black Sea was completely cut off from the Mediterranean now and the Gulf of Aqaba had opened up to Turkey. The Alps had, after fifty million summers, unfolded to a mountain range higher than the Himalaya in earlier ages.

Nature took its course, followed its old rules or invented new ones, spawned new species and obliterated others. After further fifty million years two species emerged, distant descendants of dog and elephant, who were equipped with limited intelligence. The latter lived settled and laid out huge tree plantations they cultivated with titanic tools, while the others were nomadic marauders that made life troublesome for the farmers. Both peoples didn't advance beyond a primitive, semi-animalistic development level and it's not necessary to tell more of them here.

Two hundred million years after humanity had perished the collision of Australia and the Japanese landmass had unfolded a circular mountain range that reached up into the stratosphere. It enclosed an ocean so deep that its black waters steamed from the heat of the Earth's interior. It was in this era that for the first time an extraterrestrial people visited Earth. It was a race of cosmic philosophers whose main occupation was to contact the Dūül, a hypothetical lifeform inside the stars that they were convinced existed and had a comprehensive knowledge of the universe.

The Gurú, as they called themselves, traveled in giant ships spacious enough to house their whole civilization. They used to stop off on habitable planets for a few thousand years, examined the mother star and used them as starting points for missions to nearby solar systems. They were small beings with blue fur and three legs as well as three upper limbs to perform profane tasks. On their delicate bodies sat an oversized head, shaped like a pointed cap, from which three tiny eyes thoughtfully scrutinized the world. On Earth they built a city with thousand spires on the slopes of the circular mountain range that reached from the seething depth of the black ocean up to the highest peaks and was called Trudevall.

As the Gurú discovered Enola and the 28er they immediately recognized them as ancient artifacts of a civilization long perished. They were familiar with the principle of stasis fields, so they – under the direction of their polymath Shedelkop Jurdenweil – just took tissue samples from Enola's knee pit to

analyze the nunno. Jurdenweil discovered that Enola's genome was stored in every single of the nano particles that first assembled a substructure made of macro particles which in turn composed the pseudo-DNA of the nunno cells. This DNA was constantly compared with the code of the nano particles to correct deviations. The cells generated energy for this process by means of cold fusion of elements they got into contact with – from the ground under Enola's feet and the air that surrounded her.

The Gurú concluded that the organism they had discovered was basically immortal and estimated its theoretical life expectancy at 1069 years, a number that – though absurdly large – corresponded rather closely with the lifespan of the universe as extrapolated by Jurdenweil.

Why, they wondered, had such an effort been put into something so trivial like a (as they had correctly assumed) means of transportation and its (incorrectly assumed) robotic driver? And what could have happened to their constructors – surely an advanced, ancient race? The question could not be answered with the available information. Philosophical implications could not be stated clearly and so the Gurú lost interest in such technical sophistications and turned their attention once again to the Düül.

The millennia that the Gurú spent on Earth were just a short instance measured against the time that had already piled up on Enola's back. The sun had changed by now and a visitor from earlier times (or Enola herself) would have noticed that it was much hotter on Earth than during previous eras. Geological processes had an effect on Enola's location too. The Alps were past their zenith and their giants peaks gradually leveled by erosion. The resulting sediment covered the northern areas which caused Enola to disappear underground a second time.

Shortly afterwards the crusade of the Kraan began who came from the Magellanic Cloud in their javelin-shaped spacecrafts to set the galaxy on fire. The peace-loving Gurú were among their first victims. Their civilization spacecraft was destroyed without warning exactly at the time when they had

managed to communicate with a free-floating Düül. Most of the Gurú living on Earth who had survived the first wave of attack died of horror when they realized what was happening in the orbit. Others desperately invoked the Düül for help.

The Düül answered to their prayer by singing:

Once I rode
on the Big Bang's surges,
saw matter and radiation decouple
particles, stars and galaxies emerge

Drank the light
of thousand stars,
dreamed at the shores of faraway quasars
and swam in their plasma oceans.

Now I walk
in dark realms
where cold, dust and ice make me weary
and creatures born of mud.

The dust, the ice, the flesh
are just ashes while all is changing,
alive for just a fleeting moment,
so please stop screaming, I don't care

And with this it retreated.

Trudevall became the headquarters of the Kraan within the Vega sector. They built a colony on Earth and burrowed deep tunnels to exploit the resources of the planet for constructing their armada. They had little regard for the inhabitants of the planet that were either enslaved, eaten up or wiped out – almost as it had happened during the age of man.

As the millennia passed, Trudevall turned from an outpost into a fortified garrison and finally – when Earth was already located deep within the Kraans' galactic empire and of no strategic importance anymore – into a sparsely manned station.

It was not before further ten million years had passed that Enola, due to wide-ranging geological transformations, emerged into daylight again. The bulk of the Kraan forces had reached the Andromeda galaxy by then which had approached the Milky Way to the half of their former distance. The administrative center of the sector was moved to Tau Ceti and Trudevall was abandoned. Enola was thus probably spared quite some hardship, for the Kraan were three meters tall humanoids who resembled humans to a remarkable degree and surely had realized, other than the Gurú, what it was that protruded from the 28er ...

It may be mentioned that the Kraan race was, thanks to a weird quirk of fate, extremely long-lived. But even in old age they didn't acquire wisdom and temperance and thus continued to conquer and ravage other worlds. Their warmongering and greed soon pervaded everything near and far like a force of nature or, actually, like the primal forces of the universe itself, and whoever crossed their path was crushed.

As the tectonic movements gradually came to a halt, a super-continent formed along the equator one more time, similar to Pangaea in prehistory. Enola was located in the border area of this continent, at the bottom of a tropical shallow-water ocean. Here she was in the middle of colorful corals, anemones and parrot fishes and was eyed by sharks and sea turtles which calmly faced the coming eons of their existence. Meanwhile the stations of the Kraan by the black ocean fell into ruins. The ravages of time ablated the peaks of the circular mountain range and Trudevall, the legendary city of the Gurú, was gone.

One and a half billion years after Jon a second technical civilization developed on Earth, spawned by a species that emerged from the mixture of several amphibious species. The race that inhabited wet bunker-like dwellings was composed of numerous genders whose appearance and character had nothing in common. As a collective name for their species they used a term that may be translated as „the Polymorphous Ones“.

In a long evolutionary process of several hundred million years they had developed a considerable but sluggish intelligence. They moved – as individuals and collectively – only

rarely and were anxious to preserve the state of things. External factors that had an effect on them usually changed faster than the Polymorphous Ones could react. This way they built up, over millions of years, an empire that was not without technological splendor but they ended as a low vassal people of the Kraan and were satisfied in this role.

Around this time the Milky Way collided with the Andromeda galaxy and formed a giant elliptic galaxy. While the orbits of the stars reorganized, the solar system moved outwards and came to rest at the edge of empty space, further away from the galactic center than ever before.

The lifecycle of the sun that changed its inner chemical composition caused the temperatures to continuously increase. One of its effects was that shallow-water oceans gradually turned into swamps and finally disappeared completely so that Enola was back on dry ground again one day.

As the Polymorphous Ones caught sight of her, the backside that protruded from the hover reminded them of a gikk, a bipedal scavenger of that time. This animal had no upper limbs but two huge head bulges and between them an upright mouth and above it a single black eye. Since the gikk was devious and sneaky and discharged a terrible smell when it felt threatened it was shunned by all other animals and so the Polymorphous Ones shunned Enola.

The civilization of the amphiboids progressed without ever reaching a peak. Their soulless intelligence increased, similar to the growing of plants, in a steady curve that finally reached saturation level and at no time made the leap of a divine spark. As the sun's luminosity further increased and the climatic conditions deteriorated they fled with their cylindrical ion spacecrafts into the cosmic depth and vanished from the course of history.

By now the temperatures in summer went up to almost 80° C. In the tropical or sub-tropical areas no water in liquid state could be found outside of the oceans. Life on Earth inevitably came to an end. Infernal storms roared in the atmosphere and it became so hot that each day another species perished.

Although the sun beamed brighter than ever before, the days were gloomy and foggy, due to the water vapor and the ubiquitous dust. A few tens of thousands years later, Enola was surrounded by receding oceans, dried up plants and a fauna of metallically gleaming crossbreeds of reptiles and insects. They resembled the crabs of earlier ages but were of considerable size with antennas of several meters length. They lingered motionless in the last muddy ponds by day and fought and devoured each other by night. Thus the long afternoon of Earth ended.

3. Aetas Solis

The sun's radiation pressure further increased in the following eons that lasted hundreds of millions years and deprived Earth of its gas envelope and thus of all life that was left. The moon had long since disappeared and the sun was a blazing ball of fire on a bare sky that resembled the sky of Mercury now.

The nunno of the 28er still fulfilled its function and kept Enola a prisoner. So the earthly sky in this last stage remained unseen since no race – not even the Kraan – would ever visit or even colonize Earth again.

Meanwhile life flourished for a short while on the neighboring planet Mars. It was here where a ship of the G'rill landed one day and a colony of these docile descendants of insects was created. The increasing warmth had released gases bonded in the ground and on the poles and thus created a respirable atmosphere. The gravity of Mars was a little lower than on the G'rills' home planet and so offered, in combination with the hot and dry climate, perfect living conditions.

Honeycomb, hive and hill colonies were built and the race grew and thrived. One day, hundred generations after the G'rills' arrival on Mars, an explorer called G'rill- X'Ais flew to that dead desert world which circled the aging sun in third position. He discovered Enola and the 28er at the edge of a huge plain covered with dust and debris and he realized that he was dealing with an artificial organism whose age was beyond all

estimates. So he loaded her into his craft and, as was the nature of the G'rill, exhibited her as a curiosity and for general appraisal in the garden of his house, close to a flat chain of hills that had once been Olympus Mons. The G'rills' time on Mars passed peacefully and full of harmony. The life they led on their new home planet was good and marked by happiness and satisfaction. Their civilization was nonetheless subject to the ups and downs of existence. Stretches of land were devastated by natural disasters now and then and settlements had to be abandoned or moved. The latter happened to the settlement where G'rill-X'Ais' house stood. As the increased frequency of sand storms impeded transportation it was moved closer to the spaceport and Enola and the 28er were left behind. The place was not settled again before three thousand years had passed. Enola had once again disappeared under ground by then – this time under the red sands of Mars.

G'rill-Hut sat on his porch and looked out over the wide Martian plain that extended before his compound eyes. He enjoyed his existence and his, from now on, ensured livelihood that was based on transporting capsules with olfactory messages back and forth between the dwellings of the G'rill. He accomplished this by means of a „locopedler“, a vehicle with two wheels and numerous pedals that were arranged in a complicated pattern so that all of his eight feet could be placed on them at the same time. The locopedler was painted yellow and G'rill-Hut wore a yellow wrap that he changed thrice a day so that no adhering odors could mingle and no ambiguous or even insulting messages came about.

His house, where the explorer G'rill-X'Ais had once lived in, had been splendidly renovated, thanks to his new job. G'rill-Hut was especially proud of the extensive porch that had been built according to his instruction. The used material was so smooth and hard that the leg tips of his queen G'rill-Ham, when she walked on it, made the most charming tripping noise that you could imagine. It sounded like a young, scarcely hardened shell that clattered in an alluring manner when G'rill-Ham stepped over the tiles.

The only shadow on G'rill-Hut's happiness was a mysterious object at the far end of the porch that stubbornly resisted all efforts to get rid of it. It was connected to a bulky thing that for the most part had sunk into the ground. What protruded was of pale pink color and shaped like two humps, as if somebody had pressed two G'rill eggs against each other. G'rill-Hut had no idea what it might be. And he was also not inclined to excavate it – who could say how far the object reached down into the ground?

It could not be destroyed. G'rill-Hut had tried it in any conceivable way, even by placing explosives between the two humps and detonating them. The superficial removal, however, was each time followed by a spooky regeneration process that restored the original state within in a minimum of time. Hut had finally made a virtue out of necessity and used the thing as a stand for his locopedler.

And so the years passed. As G'rill-Hut's body began to slowly keratinise and his queen could only produce a dull bumping, he looked back and found that things had not gone bad for him. His progeny comprised 8,743 children and apart from a few hundred bum drones that pointlessly hang around the spaceport all of them had got somewhere. So he came to the conclusion that it was time to sit down at his place on the porch, look up to the sky and regard one last time the giant elliptic galaxy in whose outskirts the solar system was located now. He listened to the clicking and clittering sounds of his favorite symphony and with its last notes the sheen of his compound eyes faded out forever.

Even by cosmic standards the G'rills' civilization on Mars lasted long – up to the last eon of the fourth billion years since Enola had been trapped in the stasis field. Since the G'rill had more faith in their resilience than in their adaptability they neither changed themselves nor their society in any considerable way. As descendants of insects they were able to resist the most adverse conditions but even for them the day came that they had to give up the fight against the increasing temperatures. As the sun became ever brighter and the atmosphere thinned out

more and more they left Mars and heavy-heartedly began to search for a new home.

With the G'rills' departure Enola entered her final stage of utter loneliness. Earth had long been a dead planet with temperatures of up to 400° C but now it became so hot on Mars too that it could no longer support life. Over time all life forms that the G'rill had once brought along from their home planet died an increasingly lonely death.

Finally only Enola was left who, for the time being, remained trapped under G'rill-Huts porch since the glass plates that covered the hover were remarkably stable. Besides there was no erosion in the thinning atmosphere and the Sun's tidal effect wasn't strong enough to cause geological changes. G'rill-Hut's house thus outlasted millions of years and it took millions of years more before the solar radiation and the last Martian storms had uncovered Enola and the 28er again.

The loss of an atmosphere and the stop of the planet's rotation made it seem as if even outside of the stasis field time was standing still. The stellar constellations still changed on the nightside but G'rill-Hut's house was located of the side of eternal day. The only perceptible change here – even though in degrees beyond human assessment – was the steady increase of the sun's luminosity while it advanced towards a cataclysm that would destroy the inner planets.

It was a few billion years after the G'rill had left Mars that the sun – as astronomers on Earth had predicted eternities ago – reached a new equilibrium state between gravity and radiation pressure and inflated to a red giant star thousands of times larger. The exterior areas of this newly developed red giant reached far beyond the orbit of Venus and the enormous protuberances that shoot up from its surface almost reached Earth. Viewed from Earth the sun's red wall of fire occupied almost the whole sky and the planet turned, like at the time when it formed, into a blazing ball with a molten surface.

Due to the extreme solar wind the sun and Earth both lost mass so that their distance initially increased and the temperatures on Earth slightly decreased. But very soon the red giant's

enormous tidal forces caused the Earth to steadily lose height and finally follow Mercury and Venus into the hell-mouth.

Mars, however, survived the disaster and even though its surface was hellishly hot it was outside of the area where rock melted. So Enola escaped destruction and instead endured in the dust of Mars that, in the red light of the giant star, shone from within.

The helium burn of the sun lasted for eight hundred million years. It had brought disaster upon the inner planets but it also provided the moons of Saturn and Jupiter with the required heat to melt the kilometers thick ice shields above the sub-glacial oceans. From the depth of the planet spanning ocean of Europe chemo-synthesizing mollusks rose to the surface and discovered that there was a whole universe beyond the confines of their world.

On Titan, too, life stirred that had once arrived in comet fragments and slumbered in the ice for half an eternity, but within the given time frame it only developed up to the stage of primitive multicellular organisms. So only the descendants of the mollusks managed to leave Europe before the sun turned into a white dwarf and the shockwaves of the planetary nebula swept across the planet – and before the cold of space seized the planets, never to give way again.

4. Aetas Lucis

While the sun burned faintly in the distance and the twilight of Mars engulfed Enola, the galaxy was located in the Virgo galaxy cluster which in turn had reached the center of the Great Attractor in Scorpio. New generations of stars were born in the universe, more and more stars with a long lifespan but low luminosity. With each generation the percentage of light elements further diminished and with it the number of nurseries for new stars decreased.

At the same time the accelerated expansion of space caused a steady decrease of the density of unbound matter. The cos-

mic background radiation approached absolute zero and more and more matter turned into dust and dark bodies. The light began to fade.

If Enola could have looked up to the sky, one hundred billion years after the G'rill had ceased to be, she would have noted that there was more and more darkness between the stars. Finally the time came when no new stars formed anymore, no islands of decreasing entropy in the steadily increasing disorder of an aging cosmos. The metallic dust of the last supernova scattered in the void or was swallowed by black holes. The universe was only lighted by the longest-lived stars but at the end even these vanished and the age of light was over.

5. Aetas Tenebrarum

In the eternal night that followed light was only a distant memory, a temporary phenomenon in the early stages of a cosmos whose true state of existence was inanimate space and all-embracing darkness.

Occasionally a flash of light brightened the universe when a planet or a burned-out star was devoured by a black hole, one of those ever larger and increasingly numerous incarnations of gravity that dominated all processes now. Even the white dwarf that had once been the sun met its end, after it had completely cooled down, in one of those black monstrosities. But Enola even survived this event since Mars had long since left the solar system at that time and moved alone with her and the 28er through the eternal night.

This journey through darkness, on a chaotic trajectory that miraculously led Mars neither into the gorge of a singularity nor on a collision course with another celestial body, took so long that numbers and time spans lost their meaning. But it should be mentioned here that time still passed.

Due to the continuous expansion of the universe the temperature had dropped so low that humans couldn't have created such a cold not even in their best laboratories. As the

temperature of the universe was only a fraction of a trillionth degree above absolute zero and the era of light and heat seemed in retrospect like just a short repercussion of the big bang the decay of free protons – and hence the decline of fusionable hydrogen – had advanced so far that the nunno of the hover stopped all processes that were not strictly vital for life. The stasis field flickered one last time and died out.

Enola woke up.

Cold and darkness surrounded her, a complete absence of any kind of energy and a silence that seemed to extend into infinity. As in a dream that slowly took shape Enola noticed that she was pinned with her head downward and that her arms were stuck. Fragments of memory returned. For a moment she thought that Jon was lying in front of the garage, waiting for her but she soon realized that this wasn't the case and that she was at a completely different place.

The gravity didn't correspond with Earth but rather with Mars. Enola's stored this fact while her brain continued to work. There was no trace of an atmosphere and the temperature was so low that it only could have been created by artificial means. After thinking about it for a while she came to the conclusion that she was in simulation tank, most likely in Neo Caledon where they had facilities for this kind of examinations. The thought, that Jon would make such efforts for her repair amazed her and filled her with gratitude.

So she waited for a while.

After nothing had happened and nobody had noticed her vital signs for quite some time Enola decided to free herself from the hover. Her nunno had fused with the 28er at the arms and the hip which filled her with a dark foreboding. She strained her synthetic muscles and rose with all her power. After several attempts she managed to pull her upper body out of the entrails of the car, not without severing her arms at the elbows and tearing a gaping hole into her side. While the nunno regenerated the damaged parts, Enola just stood there and pondered. Then she walked out into the black wasteland of Mars.

Enola had surely not been constructed for scientific or intellectual tasks but as a companion for humans on a physical and emotional level. But still she was equipped with a knowledge and an analytical intellectual capacity far superior to any man. Apart from that she was able to take measurements of highest precision with her body's own sensors. After a few steps in her own light she had already assembled all available information and measurements to a coherent whole and a conclusion forced itself on her so terrible that it would have killed a human faster than the vacuum or the coldness of space. The result of her examinations was so monstrous that Enola mistrusted her own perception and conceived numerous tests to check if she didn't suffer from a hallucination. As she had convinced herself that the things and conditions around her were real she paused and didn't move anymore. She had realized where she was – and when she was.

Even the most hardened Kraan would have turned his weapon on himself under these circumstances and men like Laxdal or Hedronax would have cried for their mothers in tears before perishing of fear and madness. Enola, however, just stood there and while she emitted the last light in the darkness at the end of the cosmos she looked across the ashes of all that has ever been. The cold dead matter seemed to her like a fifth element, the stuff the hell was made of, that awaited each universe and each lifeform at the end of all being.

She had the option of deactivating herself but the idea of ending her existence here and becoming part of the lifeless dust infused her with a reluctance that she couldn't justify and that surprised herself. She didn't know fear and solitude had always been part of her existence and so she accepted the burden of being witness of the end of all things and of enduring loneliness as had never been experienced in the history of the universe.

For a long time she just randomly wandered about Mars. She always returned to the 28er, the only link to her previous life, but never stayed for long. After she had managed to reactivate

the on-board electronics of the hover she found it primitive in a way that was even more depressing than her situation on Mars. Her conversation with the control unit was limited to insignificant aspects of the traffic situation, the ground conditions, energy costs and sometimes the weather.

„Due to the low outdoor temperature it is not recommended to leave the vehicle," the hover said. Or things like: „Considering the available resources, extended rides are not possible. Please augment the energy reserves immediately!"

On one of these occasions it announced: „36% of the nunno structures are degenerated and need to be replaced."

„Oh, shut up!", Enola said.

When she didn't walk she simply rested and got lost in memories and conversations with herself. Her own nunno too showed signs of decay. In various spots of her body adenoids developed that assumed the shapes of organs or limbs. On the left upper arm two new noses grew, from her back a third arm protruded and in her hip a new head developed that inaudibly screamed into the darkness all the time. After she had walked round the planet countless times further walking became impossible as one of her legs began to grow uncontrollably and was soon several meters longer than the other. So she sat on a stone, her chin resting on a fist and escaped reality in her thoughts as the world was no longer a material place but a concept of infinite anguish and hunger for life.

This was the longest part of Enola's journey into eternity for now she was conscious – although this state, due to the lack of sensory input, could hardly be distinguished from being in the stasis. When she didn't think or remember things from an earlier world she basically didn't exist at all.

„I think, therefore I am," she summarized and burst into a laughter that had the sound of beginning insanity.

And the earth was without form, and void; and darkness was upon the face of the deep, and Enola, who sat nude and disfigured by the nunno's adenoids in the dark, reached the point when she became convinced that only divine power could bring light into the darkness and renew creation and even

though she wondered where there may be a place for gods in this dead universe she began to pray.

Around her time passed in an inflationary manner. The black holes, the final stage of matter, had themselves begun to dwindle and the universe filled with the photons of their decay. Only a few randomly straying celestial bodies such as Mars were spared from the annihilation of all matter and information. With this final process the matter density of the universe approached zero and at the end it seemed like there had never been something like time at all. Space-time collapsed into a single point of unimaginable energy density and a new cycle began.

In the inferno of a new beginning Mars and all other celestial bodies and entities that had survived up to this point perished. The streaks of their remains, no longer of baryonic nature, permeated the new cosmos long before matter and radiation had separated there. Of the four fundamental forces only gravity affected them and so they – though dark and invisible for all eternity – gave shape to the new universe.

6. Aeternitas

During that infinite moment that followed on everything and preceded everything diffuse light seeped into the darkness as if the space surrounding Enola was enclosed in a glowing sphere with cracks through which light penetrated the blackness. Any causality and order of things was lost. Chains of thoughts entered her brain in an inextricable tangle and in the void before her adenoids of the nunno grew out of nowhere and fused with her. Following a blind flight instinct she set her deformed body in motion towards a small rock formation but whenever she looked up the rocks seemed within her reach one moment and unattainably far the next. She finally gave up and feebly sank to the ground.

Above all an infernal noise rose, a cacophony of voices and songs. The boreholes of space-time cracked open and drained into eternity and the voices of all those who had ever lived,

thought and talked, in all places that had ever existed and ever been reached by Mars or would be reached in infinity were suddenly assembled here. Enola thought she heard trumpets and the singing of angels, mingled with the screams of the damned, eroded by their own malice, and she couldn't tell anymore whether these voices were real or products of her own mind.

She thought that she was tired now and should sleep for the rest of eternity and a primitive part of her mind that unswervingly clung to the principle of cause and effect put this thought into practice. While the deactivation code spread through the nunno and her body and her memories vanished cell by cell, she suddenly had the impression that one clear sound emerged from the chaotic noises and she heard a lonely voice singing:

Here at the endpoint of all times
I must admit ashamedly,
that those I have looked down upon
knew more than I will ever see.

Aynstain and Hi-Sennberg,
Jurdenweil and X'Ais,
petty little creatures but
great-hearted and wise.

I am, it seems, the opposite,
this much I have to state
'cause until yesterday I thought
contraction is our fate.

However, now the curtain lifts,
the comedy's next act impending.
The missing audience again
escapes the actors understanding.

And while I am inclined to say
it's been a waste of time

I'm not here to bemoan my way,
forever and a day
in slow wailful decay
where nothing's meant to stay
at least have taught me how to rhyme

As the words of the Dūül died down, Enola died too and she
smiled and spoke: „Let there be light!"
And in the beginning was the Word.

Hey, Mr. Spaceman!

RONALD M. HAHN

Translated by Michael J. Berridge



Ronald M. Hahn was born in 1948 in Wuppertal where he still lives. Initially a typesetter, he set out in the early 1970ies on a prolific career as writer, journalist, translator, editor and literary agent inside and outside of the science fiction field. He was editor of the groundbreaking book series Fischer Orbit from 1972 to 1974 and editor of Ullstein Science Fiction from 1982 to 1988. He compiled the German edition of the The Magazine of Fantasy and Science Fiction until 2000. In 2002 he founded in collaboration with Helmuth W. Mommers and Michael

There comes a day in the life of every man when he has to decide whether he will, in the future, stand in front of the bar or behind it. I was faced with this question on April 1, 1904, as I woke up with a throbbing head in a Leopoldville hotel room and remembered that I had finally run through the last of the gold nuggets I had washed out of the icy creeks of the Northwest Territory. A letter from the hotel management lying on my bedside table acquainted me with the further fact that my presence was no longer valued. That naturally cheered me up no end!

I was about to button up my puttees when someone pushed another letter under the door.

Oho, I wondered, what can that be? An invitation to the Arctic hare hunt from Prince Woronzeff? A request that I partake in Lady Hamilton's next gala dinner? A letter from the Chase Manhattan Bank, advising me that two friendly gentlemen are on their way to see me, for a little talk about the future of my overdraft? Or a handwritten note from the casino, to apprise me of the fact that I had been observed stealing a silver spoon?

It was none of these. The letter was from Japan and came from my old comrade-in-arms Jack, who was engaged in reporting the Russo-Japanese War for the Hearst yellow press.

„I'm just reading the new issue of the Flash Review," said his hastily scrawled lines. „The publishers are going to make a go of it, all right. However, it seems to me they are making a number of mistakes." (Here followed a list of all the improvements Jack was proposing in the Flash Review). „Visit the edi-

tors when you're in London, won't you," his missive concluded. „But in Heaven's name don't let them know that the suggestions come from me. Offer them as your own! Otherwise these guys would make me their Far East correspondent – and that's something I just can't afford, not with the good rates I get. Above all, tell them to fire the dreary old bore who writes up the erotic literature... Tell them to get hold of a good-natured dummy who can report his view of the people who are hard at it."

As nothing was keeping me in Leopoldville but my debts I resolved to turn words into action. A change of scenery seemed to me a prime requirement – and there was no extradition treaty between Britain and Belgium, either. England was just the place for me, in fact, even if I had never so much heard of the Flash Review before.

I got dressed, borrowed a handcart from a hotel porter, cleared my suite of the bottles which had been tending to accumulate, used the money back to pay the bill for the last four weeks and took the next steamship to London. On my arrival I took a cab to Soho, where the editorial offices of the Flash Review were housed. The company was located on Portobello Road, where it occupied six small back rooms, and was directed by Louie Lob and Herbie Hudel.

Herbie Hudel listened to my story with interest and accepted my suggestions without comment. He fired the dreary old bore who wrote up the erotic literature and, before I understood why he had been plying me one Scotch after another, I had signed a contract in which I committed myself to becoming his successor for the weekly sum of five shillings and sixpence.

Louie Lob, who then made an appearance, held out the prospect of a speedy increase in salary. An advance was unfortunately out of the question, my new bosses assured me, as the Flash Review had not yet turned a profit. But in three or four months' time... And anyway: Were we not men of... er... Culture? Were we obliged to bow to Mammon?

The Flash Review, I learnt, was enjoying the attention of the London and Leipzig publishing houses to an ever-increasing

K. Iwoleit the science fiction magazin Nova and remained its co-editor until 2011.

Outside of the science fiction field he gained some popularity with his film encyclopaedias (many in collaboration with Volker Jansen) and his youth books, the latter mostly with Hans Joachim Alpers. His stories have been translated into more than ten languages and his fiction and nonfiction was awarded with the Kurd Lasswitz Preis seven times and with the Deutscher Fantasy Preis (German Fantasy Award) once.

Translator Michael J. Berridge was born in London-Wembley and lived for many years in Canada and in Wuppertal, Germany. He worked as a nonfiction translator (mostly of court documents), but also as a scout, specialized in German musicians, for the British music company EMI.

degree. The advertising revenue would soon be enough to justify per-line rates for the freelancers. In the meanwhile, of course, I could keep the publisher's copies and sell them off to a second-hand dealer.

Great!

Now that Lob & Hudel had found their good-natured dummy, I got to work straight away. What else could I have done? With neither cash nor lodgings, I could at least get warm on the Flash Review's editorial premises.

Customers of the periodical for which I now worked included above all booksellers, libraries and those literary journals which could not afford a reviewer of their own. The last-named reprinted copiously from the Flash Review for a minimal fee. Booksellers and librarians picked up reading tips from us. Books which got a positive write-up in the Flash Review found their way onto the shelves more readily – and publishers naturally appreciated that. In the circumstances our staff were of course expected to deal generously with the titles that came in to us. Our motto was: Never upset an advertiser! But for a weathered press man like myself that was naturally the oldest of old hats.

I retreated to an unheated office, resisted the temptation to crib of the blurbs, and with a subtle thirstiness leafed through my predecessor's files. It was obvious to me at once that he struck close to the text and generally avoided metaphors. An example of what the Flash Review expected of its staff was, I felt, provided by the review of a recent erotic novel by Lassie Brown, which I made a mental note of, and underlined three times.

„On Table and Bed," I read, „by Lassie Brown. Pub. by Prick & Snatch Publications, London 1904. 256 pp., Cloth, 2/6." And: „The central figures of this masterpiece of erotic literature, which the congenial young Whitechapel author, whose publishers never fail to take advertising space in our magazine, here presents, are three girls and a man. The girls are all young, sweet, eager and luscious. The first is slim and has medium-sized tits, the second is very well proportioned and has firm boobs, the third has gigantic tits and wears boots. The first girl has black stockings on without suspender straps, the second..."

As I began to impress the words of this gifted reviewer on my mind for the fourth time, the door flew open and Louie Lob stormed in. In his hand he was agitatedly waving a sheet of paper, which I had no difficulty in recognizing as a telegram form.

„At last," he cried, „the Flash Review is receiving the recognition which it has long deserved!"

„Sir?" I inquired, irritated, for the perusal of the review had hardened my attitude in various ways.

„Get packing!" sang out Louie Lob. „You're going to be a field reporter, my friend! You're travelling into the Eifel!"

„To Old Germany!" trumpeted Herbie Hudel, who was hopping about like a dervish behind his colleague. „Ah, to see Old Heidelberg again – and eat sauerkraut!"

„Foreign correspondent?" I asked, as Lob and Hudel bundled me into a waiting cab. „But we're a review service!"

„Who cares?" called Herbie Hudel, as the cab moved off. „When you get an exclusive engagement, you have to take it seriously! Don't let us down, will you, young friend? The world will be clamouring for your report! Have you got a pen with you?"

And we were off. The cab took me to the docks and stopped in front of a decrepit sailing boat whose captain got me across the Channel in a few hours. Ignoring my frantic protests, he steered straight for the Belgian port of Ostend. Luckily the news from Leopoldville had not yet made the local papers. Collar turned up, hat jammed down over my eyes, I left the boat, climbed into a waiting coach and went through to Old Germany at top speed. As I was arguing the toss with the German customs officers over a mickey of Scotch, an elegant-looking gentleman with a monocle came up to us, laid into the officials with the abominable gutturals the Germans call a language, and gave them hell. The customs men groveled, grumbled and retreated.

My rescuer – that much was obvious – was of noble blood. And English, to my surprise.

„I am Lord Philip Loghead," he said. „Have I the honour to..."

„No names, Sir," I whispered with one eye on the Belgian officials lounging around in the vicinity. „But if you are await-

ing the special correspondent of the Flash Review, then I'm your man."

„Splendid," said His Lordship, beckoning me into a further waiting coach. Soon we were thundering along a rough road southeast.

„Would you be so good," I said, after studying my traveling-companion in silence a while. „As to inform me of the purpose of my visit, Sir? I must admit that my departure was somewhat abrupt... My superiors were in such a hurry..."

„Patience, patience," said His Lordship. „Bear with me." He was a man in his forties, with a weary look in his eyes. „Mr Lob and Mr Hudel could tell you nothing for the simple reason that they know nothing, my dear boy. What was your name again?"

„It is P.M. Fox, Your Grace," I replied humbly.

„What does the P.M. stand for?" asked His Lordship.

„For Potiphar McGurgle, my Lord." I blushed. His Lordship giggled, but I was used to that.

„The famous playboy?" Lord Philip raised his eyebrows. „Weren't you the chap who took the Leopoldville casino..."

„You've heard the news?" I gulped. His Lordship had another giggle. Obviously, this prized upper-class twit read the Congolese press. It was really dumb though, the way I'd let myself in for the ULTIMATE GAME a day before my departure. Luckily nobody, in London at least, had learned that I'd had to leave the casino minus my shirt.

„You're the talk of the town in Leopoldville, Mr. Fox," said His Lordship. „But enough of that for now. I would like instead to prepare you for the man we are to be seeing. He has retreated into the Eifel hills to shake off these Russian spies the world is teeming with ever since gold was discovered in Alaska."

„Aha," I said, not understanding a word of it. „And how, may I ask, will he shake off the German spies?"

Lord Philip gave a hearty laugh. „Oh, they're no threat to us! On the contrary. Ever since we have come under the personal protection of the Archduke Johann, they make sure that the others keep their distance."

„Archduke Johann?" I asked. „The man who discovered the famous yodeller?"

„The very man! I see you have some appreciation of German culture.”

„Thank you very much,” I replied, flattered. „But... er, what I can't quite understand, my Lord, is... er... why this... um... unusual man we are on our way to visit is under the protection of the German authorities. Was there no way to guarantee him the... er... protection of the British Crown?”

„Oh, but my dear Mr. Fox,” said His Lordship in a tone of mild reproof. „Do you know a single British secret that is not known to the rest of the world?” As I shrugged my shoulders uncertainly, he went on: „Well, there you are! Ever since these Bolsheviks have been laying waste London with their everlasting bombs and playing into the hands of the Russkies...” His Lordship shook his head. „A specter is haunting Europe! Just one word: Karl Marx!”

„Really?” I said. The coach took a bend and I bumped my head on something.

„Thanks to German thoroughness,” continued His Lordship. „We have been able to push ahead with our project unhindered up to the present time. Archduke Johann has graciously granted us the use of his hunting lodges. For that he gets a seventy per cent cut of the profits.”

I had to believe His Lordship, although I had not the slightest idea what he was on about. It was already pitch dark when we stopped a few hours later in the middle of nowhere, crossed seven slit trenches and picked our way through a minefield, and by this time it was clear to me that he must be working on a project of prepossessing importance. Wherever you looked the place was teeming with spike-helmeted, walrus-whiskered German soldiers. They frisked us right down to our underwear, then led us to a great house, whose windows had been boarded up and the boards nailed down.

The man who awaited us was a world-famous scientific genius, and I recognized him at first glance: Professor Peter Paul Phoney. The world said of him that he had withdrawn from public life, years ago, to finish his life's work in complete seclusion. He was small, rotund, almost bald, and had a long white Rip Van Winkle beard, and a pince-nez enthroned

on his bulbous nose gave him a learned and benevolent appearance.

Professor Phoney at once introduced me to the members of his establishment: Tom (tall, thin, pencil moustache, pronounced Adam's apple), Dick (fat, short, awkward, projecting ears) and Harry (stubby, thickset, gloomy). The Professor's left hand – assuming that Lord Philip was his right hand – seemed to be Captain Compart, a regular old warhorse. He had served long years in Her Majesty's Royal Navy and still behaved as if he were commanding a crew of barefoot matelots. His voice had the volume and the tone of a foghorn, and he seemed to be a copious imbibor too, to judge from his red nose and the whisky on his breath.

„That would complete our party, then,” said professor Phoney with satisfaction. „And I consider it a particular honor, Sir,” he continued, turning to me. „That your newspaper has gone to the trouble of sending a special correspondent. That shows me that the quality press is very receptive to scientific matters.”

His Lordship cleared his throat.

Captain Compart grunted.

Tom, Dick and Harry stared at me.

I'd have been the last person in the world to have taken the Flash Review for a serious organ of journalism, but I was unwilling to contradict the Professor, particularly in the view of the high hopes my employers had of me. When a genius like Professor Phoney called for a journalist, weighty, world-shaking revelations were sure to be imminent. What could he have discovered? Was Ptolemy right after all? Did the sun go round the Earth? Was a world disaster imminent?

Whatever the Professor had to tell the world, it must be something big! It seemed strange to me that he'd chosen to invite the critic of a literary periodical, but when all is said and done, one should have respect for the decisions of great scientists when one is only a raw layman oneself.

The Professor's myopic gaze scanned me critically; then he asked: „Have you ever taken part in a research expedition before, Mr. Fox?”

„To be honest, sir," I answered. „This is the first I have heard of your enterprise. I hope the goal of your expedition will not be the Belgian Congo, by any chance?"

The Professor seemed likely to split his sides laughing. Tom, Dick and Harry cackled. Lord Philip smirked. Only Captain Compart reacted differently. „If you ask me, we could have done without this press hack, Doc," he said, glaring at me suspiciously. „We can always write the report ourselves."

Professor Phoney's laugh turned into an embarrassed grimace. Then he stood up, smoothed his trousers, laid a hand on my shoulder and said in a fatherly tone of voice: „Follow me, young man. Come into the inner courtyard with me. I have something to show you."

With the rest of the gang at my heels I followed him through seemingly never-ending corridors till we stopped before a heavy, hand-carved entrance. The Professor beckoned to Lord Philip, whereupon the latter beckoned to Captain Compart. Captain Compart indicated the entrance with his chin. Tom fished in his pocket, brought a large key to light and turned it in the lock. Dick and Harry opened the double doors.

I stepped over the threshold and blinked. In front of me, illuminated by a number of lamps, lay a long-stretched-out shape, vaguely reminiscent of a beached whale. It was about thirty yards long, cigar-shaped, rounded off like a huge grenade. The side facing me, to my amazement, included windows with the appearance of portholes.

„What is that?" I asked. „A submarine?"

Professor Phoney laughed. His Lordship giggled. Captain Compart groaned in the face of such stupidity.

„No," said the Professor at length. „What you see here, young man, is the vehicle which Archduke Johann's support has enabled us to build."

„A vehicle?" I queried in surprise. „But it doesn't even have wheels!"

„It needs no wheels," went on the Professor nonchalantly, „because it is not designed for use on land. This vessel will speed through space. I call it a spaceship."

„A spaceship?" I heard myself saying. „A spaceship?"

„We will be flying to the planet Mars in it tomorrow morning,” said the Professor gravely.

Of course I needed some time to take in the full import of this sentence. Professor Phoney and his team were going to fly to Mars! To another planet! Well, after all, I thought, why not? No-one has ever been there before. When the world learned of it, there would be great headlines for sure. No wonder my chiefs were so proud that one of their staff was going to be on board. A Times sub-editor with scientific training might have been more useful to the Professor – but as things were, the Wheel of Fortune had turned up my number. The Flash Review would make history – and I would be writing it! Already I saw myself – decorated with the Order of the Garter – shaking the hand of the Queen and swigging cocktails at Court. I'd pull in the fattest of correspondent's fees, the world would be my oyster! I silently thanked my friend Jack, to whom I owed all this. He would be amazed when he read my spiffing articles after his return.

After we had drunk a drop to the success of the expedition, I shook the Professor's hand and said: „Sir, I'm your man. Gentlemen, I am at your disposal.”

„I thank you,” said the Professor with feeling and clasped me to his breast. Lord Philip returned my determined handshake. Tom, Dick and Harry were somewhat more reticent. Only Captain Compart showed his feelings openly. „Go to the devil – tanks to you, I can only take one cask with me now,” was his only comment, as I endeavoured to make a good companion out of him.

The Professor explained that our journey would last twelve months. We were well prepared: the spaceship's hold was full of salt pork and ship's biscuit. Apart from that, nothing had been overlooked. Lord Philip had a case of French champagne for festive occasions, the Professor was taking a box of Havana cigars, and Captain Compart had brought a cask of Old Scotch on board with him. After Archduke Johann's men had shot us into space with a huge catapult, we took our places in the drawing room of the spaceship and drank to one another's health.

So far everything was running to plan. The Earth grew smaller and smaller, and soon it was possible to take in Europe and Asia at a glance. I thumbed my nose at my creditors in Leopoldville and commenced my journal. Needless to say, my sparkling wit would take the literary world by storm; of that I was determined. The reader should not merely be instructed by our discoveries; he should delight the richness of vocabulary with which Mother Nature had endowed me. Anyway, I was thinking of having my yet-to-be-written articles issued in book form as well. William Blackie and his Sons would certainly be mad keen to get my adventure into the bestseller lists.

While the Professor remained on the bridge, adjusting the controls, Captain Compart supervised the ship's crew. Tom, Dick and Harry, I now realized, were not the scientific assistants of the brilliant Professor, just plain servants whose job it was to scrub the deck und keep the galley shipshape.

On the third day of our voyage – with the Earth now no more than a cloud-capped ball – I noticed that Harry was prone to insubordination; no sooner had Captain Compart given him an order than he stuck out his tongue at him behind his back. Tom and Dick, while less recalcitrant, were lazy, greedy fellows. As time went on, they made a more and more doubtful impression on me. Then they revealed their true character: after two weeks they were stealing the Professor's cigars, getting drunk and giving me insolent answers when I asked them to make less of a row.

Lord Philip seemed particularly irritated by their conduct. „All this is a consequence of the growth of civil rights," he said indignantly when addressed on the subject. „One has only to grant this rabble a break from work, and the next thing is they're asking for vacations!" And when pushed further, he would say: „In my brother-in-law's textile factories there used to be none of this. The people put in eighteen hours' work a day and had no complaints. What this scum needs is a good horsewhipping!"

„Quite right, my Lord," agreed Captain Compart. „This riff-raff doesn't even respect my Scotch anymore. But these black-

guards know that we are dependent on them for the moment. That explains their rank disobedience."

"Dependent?" snorted His Lordship. "The servant has yet to be born who makes a Loghead dependent on him! Why not simply dismiss these proles and replace them with others?"

"Because," said Captain Compart. "We are over ten thousand miles from England, if I may be permitted this observation. With respect, my Lord, we really cannot change the crew at present."

"Very well, then," said His Lordship and scratched his ear. "But at the next port these good-for-nothings get a regular whipping."

I kept my journal. There being very little to see in space outside, it didn't fill up very quickly. Every time I looked out of the portholes I saw the same thing: just stars and darkness, darkness and stars. The same old stuff you can see from the Earth. As time went by it was really getting to be a bore.

When after six weeks the cigars and whisky ran out, people began to get nervous. His Lordship ran up and down like an angry tiger, Captain Compart displayed severe withdrawal symptoms and rapidly fell to pieces. The crew, who observed this with malicious delight, soon lost all remaining fear of him and took filtering aftershave through slices of bread to at least get a nightcap now and then. When Captain Compart gave them an order, he got replies such as "Do it yourself, you lazy pig," or "Go to blazes, you capitalist lackey," or "Take it easy, mate, or you'll get a punch up the conk."

As manners on board visibly coarsened, it was of course only to be expected that Professor Phoney, who hitherto had devoted himself to his scientific studies, would get a swiff of things. In the eight weeks of our voyage he stormed into the ship's library one day in a towering rage – His Lordship was reading Chaucer, I was writing my journal – and said in a voice of high-pitched indignation: "This, gentlemen, is going too far! I have just tripped over an empty whisky bottle! The crew's quarters, into which I tumbled, look like a pigsty! And Captain Compart lies on his bunk daydreaming! When I spoke to him, he had nothing to say but 'Well, go and lie down again.'" Pro-

fessor Phoney gasped for breath and added, beard bristling: „It seems almost as if this spaceship's complement lacks the slightest respect for the exalted goals of science."

„Sir..." I said, if only to say something.

„Hold your tongue!" thundered the Professor, quaking with wrath. „What condition will we be in at the end of our voyage, if morale is up the spout only eight weeks after departure? Do something, and I mean now!"

„Right you are, Sir!" I cried, standing to attention.

„You will take over Captain Compart's duties at once, Fox! You know very well what you have to do!" Growled the Professor.

„Right you are, Sir!" I trumpeted. „But won't Captain Compart be put out if I..."

„I don't give a damn about that!" said the Professor, blithely disregarding the fact that in general he considered arguments of this kind to be unscientific. „Order is to be restored at all costs!"

I sighed, gave His Lordship a nod, strapped on two pistols and headed for the crew's quarters.

I would have done better to remain seated, for scarcely was I in the corridor than our trusty craft began to lurch violently, turned somersault and – sank. That is, I had the feeling that it sank. I sank, in any event – to the floor. As I came round again, all alarm bells were ringing and someone was shouting: „All hands into the boats! Women and children first!"

I must say, I found that very curious indeed. „We have collided with an asteroid," sighed the Professor in agitation. „All is lost! We are going to crash! Captain Compart! Captain Compart!"

Captain Compart came staggering out of his cabin. He was unshaven, hung over and looking pretty pathetic – as always. Something in his face reminded me of a WANTED poster I had seen in Casablanca not long ago.

„Wassamatter, huh?" he asked, fastening his braces.

„We must at all costs avoid panic!" screamed His Lordship, foaming at the mouth. „Calm down, Mr. Fox, for Heaven's sake! Do calm down, will you! Just pull yourself together!"

„Me?“ I asked, shaking him off. It went Scrunch again, then I was flat on my face for the second time.

„Ground contact!“ reported Tom. „We've made a crash landing!“

I must confess that at this moment I felt my resolve rapidly ebbing away. We had set out to turn one of mankind's bold dreams into reality. But instead of planting the banner of Archduke Johann in the sandy red desert of our neighbour planet and deciphering the secrets of its canals, we were grounded on a miserable pock-marked lump of rock hurtling through space.

While Lord Philip – who happily had broken my fall somewhat – moaned and groaned underneath me, Tom bellowed from the bridge: „There! There! There! I've seen movement! Professor! Professor!“

„Brothers in the cosmos!“ crowed Professor Phoney, as he got up off the floor. „We are not alone in the universe! Open the hatch! Let us greet them!“

I stood up, helped His Lordship to his feet and hurried to the exit. Tom, Dick and Harry were just sliding back the huge bolt. Captain Compart was wrestling with his braces. The overjoyed Professor was hopping excitedly from one leg to the other and lapsing into Latin in view of the epoch-making nature of the occasion. No sooner was the hatch open than he jammed a top hat onto his head and sprang out.

„Take care!“ I cried. „The natives might not be friendly...“

Professor Phoney went back. A feathered arrow hat pierced his hat. His face was white. His chin trembled with anguish. „They are savages!“ he cried. „They shot at me! Me, a man of science!“

Ping! Ping! Ping! A whole salvo of arrows whistled through the open hatch and buried themselves in the corridor wall.

„Close the bulkheads!“ roared Captain Compart. „Give them a broadside! Where is the infantry?“

It was obvious to me at once that he had taken leave of his senses. Lord Philip, pushing the Captain aside, called out in a nasal tone: „Must British gentlemen put up with such a reception? Are we so far gone that we allow our honour to be called

into question by a few naked savages come up out of nowhere? It is high time we gave these iconoclasts a sound beating!"

„Steady on, Your Grace," I soothed the heated nobleman. „First we must work out a plan."

While Tom, Dick and Harry guarded the way out, grappling irons in hand, the rest of us retreated into the drawing room.

Professor Phoney, looking grim, turned his pierced hat around in his hands and mouthed dark curses. Evidently, he had expected his welcome to another planet to be different. Finally, however, he shrugged his shoulders and put his headgear back on.

„We must summon the British army at once," said His Lordship with some heat. „If necessary, the Scottish Highlanders too!"

„Scotch?" asked Captain Compart with interest. He lay in his armchair like a sack of potatoes, greedily licking his lips.

„This just will not do!" I made myself heard above the babble of voices. „Gentlemen! We can expect no military aid of any kind!" No-one paid attention to me. „How does the poet put it?" I went on at the top of my voice. „God helps those who help themselves! We must take our destiny in both hands!"

„He has persuaded me," shouted His Lordship and grasped my hands in gratitude. „What have you in mind to do?"

„A most stirring speech, indeed," confessed the Professor with emotion. „You can evidently do more than just eat sandwiches, my young friend. What do you propose?"

„Well... er... First, we should find out who our opponents are."

„We should indeed," agreed His Lordship. „Otherwise, it might yet occur to the enemy that he should come in here to find out who we are."

Professor Phoney made a pensive face. „I wonder," he said, „If these savages are controlled by a corrupt medicine man and induced to attack us by a false presentation of the facts. Perhaps they are friendly toward us at heart."

„May I ask," interposed His Lordship. „What led you to this interesting theory, my dear chap?"

„Yes, well,” replied the Professor with embarrassment. „Well then, to be honest with you... this theory isn't one of mine. I have taken it from the... er... secondary literature. Such phenomena are a common occurrence, for instance, in the South American and African bush – evil witch doctors going over the head of the wise chieftain and inciting friendly tribes against the white men, I mean.”

To know more, we went to the next porthole and looked out. Our spaceship had landed on a plain dotted with sparse vegetation. In the background were a few decorative crimson hills. Over the sandy ground that surrounded us were scattered a number of great glittering stones. I took them for shards of glass at first, but Lord Philip, who obviously had better eyesight, cried out suddenly: „Enormous diamonds! And they are just lying around out there!”

„Diamonds?” echoed Professor Phoney. His little eyes grew as big as soup plates, and he polished his pincenez lenses eagerly.

„Diamonds?” gurgled Captain Compart in disappointment. „No Scotch?”

„Gentlemen...” I began.

And then I saw one of the savages. He looked like a walking carrot with green skin and four arms and a flat beaver tail. A round mouth with one gleaming fang glowered at me. Professor Phoney said: „He too is one of God's creatures!”

„And what do we do now?” asked Captain Compart in one of his few lucid moments.

„Yes,” said His Lordship. „What do we do now to get at the diamonds?”

„Sir!” intervened Professor Phoney, his voice quivering with indignation. „You have evidently forgotten the reason for which we undertook this voyage! It is our intention to return home with scientific data. There was no mention of diamonds! We ...”

„Originally we were bound for Mars, were we not?” commented Lord Philip. „Are we on Mars? Well, then! What can be the objection to our taking a few rough diamonds back home with us, now that we are here?”

„Gentlemen ...” I ventured.

„These diamonds," lectured Professor Phoney. „Belong to the indigenous population of this asteroid and..."

„But these savages obviously have no idea of the value of this jewellery! For them the diamonds are presumably as worthless as flint!"

„Gentlemen..." I began once more.

„Did I hear someone say 'Diamonds?'" Inquired Tom, Dick and Harry all of a sudden. They were standing in the doorway, gripping irons in their hands. Captain Compart sucked his right thumb. Lord Philip blenched with fright.

„I cannot imagine what that has to do with you," retorted Professor Phoney undeterred. „I order you to return at once to your ..."

„You don't order nothing," said Tom, Dick and Harry as if with one voice. „We're taking command now – understand?" The sight of their grapnels drove me back.

„Is this mutiny?" asked the Professor, beside himself.

„Just what I always said," fumed His Lordship. „All of these insolent proles should be given a thorough beating, to teach them who..."

Captain Compart bleated like a lamb. The withdrawal symptoms were taking their toll of him. No further help could be expected from him, that much was clear.

I drew in my stomach, whipped out both pistols and snarled: „Back to work, you miserable curs! There will be no mutiny here as long as one of us draws breath!"

Tom, Dick and Harry retreated. Had I not fled Leopoldville to be held to ransom a million miles from Earth by a few lousy space sailors?

Soon after that, a suspicious squeaking made itself heard. Lord Philip ducked and the Professor dived behind the sofa. I went out with Captain Compart, who was laughing hysterically, and found that the crew had disappeared. Despite the bloodthirsty savages who lay in wait for us, they had abandoned ship. My shooting irons must really have given them quite a fright.

The hatch was open. Had the savages made short work of the mutineers? Would we all meet our end at the stake before

long? I plucked up courage and looked out. Nobody was to be seen. The footprints of Tom, Dick and Harry ended at a cucumber copse, which rose some fifty Yards to the south of us. Where were the savages? Had they withdrawn elsewhere? Patience, then, was not one of their virtues.

When I left the ship, nothing happened. My courage revived. It was a strange feeling, walking over the surface of another heavenly body. Everything was as on Earth – except for the funny plants and the giant diamonds, of course. I was soon followed by Captain Compart, the Professor and His Lordship. As no-one challenged us, our gloomy mood began to clear, and soon we were investigating the glittering rocks. They were bigger than ostrich eggs and weighed several pounds.

„We're rich!" carolled Lord Philip, stuffing his pockets full. „Rich! Rich! Unimaginably rich! Yuk! Yuk!"

Professor Phoney, as a man of pure science, followed the nobleman's doings with a jaundiced eye. Captain Compart tried to crack open the diamonds with hammer and chisel, obviously under the illusion they were bottles.

„This is the end, Professor," I said, after watching the activities of the other two for a while in silence. „The crew has absconded – and His Lordship and Captain Compart have gone mad. How can we hope to reach England again with things like this?"

The Professor sighed. „And with these savages lying in wait for us somewhere," he said mournfully. „I, too, am gradually coming to the conclusion that our expedition has not been blessed with success, young friend." He frowned, seeing His Lordship dash back into the spaceship to look for a wheelbarrow. Captain Compart sucked at a big fat diamond and burst into tears.

And then the savages sprang up all around us, literally out of the ground. They had lured us into a trap – by secretly burying themselves in the sand.

„Goddamned son-of-a-bitch!" I said, as I came round again, my hands bound, in a sort of tent. My head began to hum merrily, reminding me of that lovely hotel room in Leopoldville, where everything had started.

„I would not have thought that the special scientific correspondents of the Times were proficient in such vulgar language," observed Professor Phoney, who lay beside me. „I am really most surprised, Mr. Fox."

„Excuse me, Sir," I replied, seeking to penetrate the darkness with my gaze, „But I am neither a scientific correspondent, nor do I write for the Times. May I inquire what gives you the idea?"

„I beg your pardon?" asked the Professor, gruffly astonished. „How... what... where..."

„I am a literary critic," I said. „With the Flash Review in London. Lob & Hudel Press, if the name rings a bell."

„What – you work for that lascivious paper?" The Professor nearly choked on his indignation. „That can't be true! Lord Philip, what have you to say to this? Did I not instruct you to ask that a scientific correspondent of the Times..."

„His Lordship is not here," said Tom, his voice coming from the darkness.

„But we're here," said Dick.

„Tom, Dick and Harry," said Harry.

Captain Compart was also with us, which became clear in the form of a number of muffled grunts. The captain was lying on his face in the sand. Serve him right, the old soak.

„Now this is really quite beyond me," said Professor Phoney. „Can you explain that Mr. Fox? Why did Lord Philip take you on when I expressly... Do you think it possible that he mistook you for someone else?"

„Scarcely, Sir," I answered. „His Lordship specifically mentioned the name of my publishers. And as the publishers of the Times are not called Lob & Hudel..." I shrugged my shoulders in regret.

„Omigawd!" groaned the aged academic. „Now I understand! Lord Philip is a Russian Spy! He wanted, at all costs, to stop another scientist in our party – someone else who could transmit certain research findings, apart from me! That is why he took you – a reviewer!"

„His Lordship a Russian spy?" The thought of that made my hair stand on end. „But that's impossible, Professor! I know no-one who hates the Reds more than he does!"

„That's only logical," said the Professor. „After all, if he is an agent, he will of course be working for the Czar. And his noble blood is attested to by his observations on the working class."

„That could just be a cover," I objected. But I had to admit, that there was something in the Professor's theory.

Now it was Tom, Dick and Harry's turn to speak.

„The savages surrounded us as soon as we tried to look at the diamonds," wailed Tom. „Are they going to roast us now, do you think?"

„You are a chump," interjected Dick. „Foreigners have quite different customs than us!"

„But they had such a hungry look in their eyes," whimpered Tom and wrenched his hands. „I'm scared."

„Scotch?" murmured Captain Compart.

„Since they appear to be descended from carrots," murmured Professor Phoney reflectively. „They are in all probability vegetarians... but that in turn would mean that they are cannibals ... Vegetarian cannibals – or cannibalistic vegetarians ..."

„We must keep cool heads now," I said. „If we panic now, all is lost ... SHRIEK!"

Something cold had touched my hands from behind. A soft voice went „Pshshshhhh!" The others turned their heads, but otherwise did nothing. Even Captain Compart woke up.

Someone was working on the knots that bound me.

„Lord Philip?" I asked softly. „Is that you?"

„Par bleu," hissed the voice. „...old still, Monsieur! Voilà!"

Suddenly I was free, rubbed my stiff limbs and stood up. Our rescuer seemed to be a Frenchman. Or a Belgian. But how the deuce did he come to be here? Had the French invented a spaceship as well? Had His Lordship met French explorers and joined with them to free us? Or was Lord Philip actually a French spy?

Questions, questions. The stranger evidently slit open the tent with a knife from outside. Now he slipped from one to another.

„Who are you?" I asked him, after we had crawled into the open. „Where are you from? Have you met Lord Philip?"

„I am ze chief of zees tribe, M'sieur," replied the foreigner. „May I eentroduce myself? Théophile Francois DuBois de Bologne. Vairy pleased to make your acquaintahnce." We shook hands. „Come in my hut. I weel explain you evvraithing."

Without a word we hurried along behind him and finally arrived at a reed hut in the centre of the village consisting of about a hundred tents. Soon afterwards we found ourselves in a room floored with straw matting. Carved figures of demons grinned down at us from the walls, giving one cold shivers down the back. Tom, Dick and Harry were green about the gills with fright. We sat down at an open fire. DuBois de Bologne offered us food and drink. As far as Tom, Dick and Harry were concerned, their gluttony seemed to be greater than their fear; they helped themselves at once and stuffed themselves full. The Professor and I were too perturbed to take anything. Captain Compart raised an earthenware jug to his lips to quench his blazing thirst, but as it contained nothing but water, he spewed it out, fell over and snored on.

DuBois de Bologne was a gaunt, bearded man with dark hair, a greasy-looking beret and numerous scars. His clothing consisted of a mangy skin and down-at-heel parade boots. On Earth he had worked as an agent for the Sureté, and after we had told him of our adventures, he said: „A similar fate drove me here." And this – in brief – is his story: Two years earlier, an American inventor was able to convince the French government that he could build them a spaceship. As there seemed to be a good prospect of extending the French colonial empire in this way, the project got the go-ahead. However, the American and his people were not really trusted and so our rescuer was put into them. „We didn't reach ze planet Mars any more than you did, gentlemen," concluded DuBois de Bologne. „When we made our forced landing 'ere, all ze Americans were killed. Luckilee I was in ze hummock at ze time, so I survived ze crash un'armed."

„And how did you manage to take over the chieftainship of these barbarian savages, Monsieur de Bouillon?" asked Professor Phoney with interest.

„First of all I 'ad to conquer the old chief, of course," our rescuer continued. „But that was easy; I was able to buy ze

crafty medicine man's favour with a 'andful of glass beads." Monsieur DuBois de Bologne shrugged his shoulders. „Later, though, this rascal turned against me, because I would not marry his seven daughters. At zees moment a campaign of character assassination is being waged against me, the outcome of which is a foregone conclusion."

„How frightful," commiserated Professor Phoney. „But why did you not want to marry the medicine man's daughters? Are they that ugly?"

„When one is the only 'uman being among a lot of walking carrots," answered DuBois de Bologne. „One naturally lowers one's expectations in the course of time, but... No, his daughters really aren't ugly. But they refused to wear the lacy French underwear I 'ad in mind for them."

„I see," said Professor Phoney and blushed.

„You can surely imagine 'ow 'appy I was when I 'eard of your arrival," continued the Frenchman. „We had better move from 'ere soon, because when Umazuma – that's ze name of ze old scoundrel – learns of your escape, he'll be shouting blue murder. And then Lullu – er, I mean, God help us,"

That made sense. But how could we get back to our spaceship undetected? And – a particularly ticklish question – how could we deal with the Czarist spy who was posing as Lord Philip? We had to assume that he planned to divert our landing to St. Petersburg; after all, he couldn't have just come along for his health.

We quickly initiated our rescuer into our interpersonal problems – and did not forget to point out that Tom, Dick and Harry represented three more doubtful quantities on board.

„That we can take care of relatively quickly," said DuBois de Bologne and produced a long, jagged-edged knife. „We're all in zees together. Cut up rough and you get cut up rough. One for all and all for one. Okay?"

Tom, Dick and Harry nodded hurriedly, and I asked myself if the Frenchman could be of noble blood too. We left his hut and headed north with a crazily babbling Captain Compart in our wake. Soon we were standing before the whale-like body of our spaceship, whose portholes were completely dark. The

hatch was shut, of Lord Philip there was no trace. We rattled away, but with no effect. Either His Lordship had gone to bed, or he was no longer alive.

„By the seventh ‘ell of Killiwatch!“ cursed our new travelling-companion. „Is there no other way to get into zees vessel?“

None of us was feeling particularly cheerful, for the thought that the sun could rise at any moment did nothing to brighten our spirits.

„Your Lordship!“ roared Professor Phoney. „May I remind you that I am the designer of this spaceship! Without our aid you will never be able to leave this inhospitable place! I appeal... Oh! Oh, gosh!“

The check to his fury was due to the fact that the sun was now peaking over the horizon, allowing us to make out a few dozen screeching carrots in the light of its warming rays. They were on our track, tongues hanging out.

„In Heaven’s name, Lord Philip, open up!“ I screamed in desperation. „The savages are coming! Think of your duties as a Christian!“

Tom, Dick and Harry began to wail. The Professor hammered on the hatch with his little fists and let out a few unsavoury imprecations. I had honestly not expected such behaviour from a man of learning.

The savages were now within a thousand yards of us. They grunted, yelled, roared, whistled and howled like a pack of bloodhounds and bared their fangs in such a way as to inspire fear and trembling. Tom, Dick and Harry, teeth chattering, were praying out loud. Captain Compart sang Rule Britannia, but as I doubt if he even saw what threatened us, I can only assume this to have been a reaction to his withdrawal symptoms.

„We’re breaking the hatch down!“ I shouted in blind panic and took a run at it. Crack! Then I was lying in the sand, stars gently revolving before my eyes. My shoulder hurt like hell. At that moment I cursed not only Louie Lob and Herbie Hudel, but my old friend Jack as well, who was sure to be squatting in his Japanese trench peacefully photographing Russian grenades as they came whistling through the air.

And then Professor Phoney had his bright idea.

„What is this?“ he suddenly shrieked so loudly that I thought my eardrums would burst. „Jumping Jehoshaphat! The savages have rifles! But what do I see? They aren't savages at all! They're men in uniform! Soldiers with..." He paused as if to rally from a fearsome blow and then screamed in sheer panic: „...with Russian uniforms!"

Ha, ha! Of course this Czarist spy fell for it hook, line and sinker. With a hoarse cry of joy he tore the hatch open and yelled: „Druzhba! Druzhba!"

Monsieur DuBois de Bologne socked him a straight left to the jaw, shouting „Allez! Allez!," scythed the air with his jagged bread-knife and dragged his senseless victim after him by the collar. In a matter of seconds we had entered the spaceship, secured the heavy bolt and hurried to the bridge, where Professor Phoney flew at the controls.

Through the portholes we could see the barbarian carrots, howling and slaving, surround our fortress. They pelted us with massive diamonds and called down vampires and monsters upon our heads. Monsieur DuBois de Bologne showed me the medicine man Umazuma. He stood on a hillock – surrounded by his seven daughters with their carrot tops – and hurled furious threats at us. A hail of arrows rustled against the outer skin of our vessel. When the infuriated carrots began carting up firewood I had visions of the worst, but then came a call from Professor Phoney: „We're starting, gentlemen! We have lift-off!"

I suppose everyone can imagine how relieved we were at that moment. Tom, Dick and Harry fell on one another's necks in brotherly side hugs. DuBois de Bologne and I slapped one another on the shoulder. Captain Compart, who now seemed to think he was a hen, cackled and did his best to peck at the grains of sand we had brought in on the soles of our boots.

„Don't be surprised, Monsieur," said I to DuBois de Bologne with an embarrassed smile. „Captain Compart hasn't gone off his rocker. He's English, you know!"

„Oui, oui", nodded the Frenchman. „That is his spleen, n'est-ce pas?"

I assume the account of our return to Earth is common knowledge. It was a sensation for the world press; after all it isn't every day that a spaceship lands at the Christmas fair in Munich unannounced. A Salvation Army brass band, who happened to be there at the time, played „Nearer, my God, to Thee" as we goose-stepped off our craft. Although the area was blocked off at once by a platoon of spiked helmets, not even they could keep Captain Compart from helping himself to what he had had to do without for so long. However, our backer, Archduke Johann, proved generous enough to pick up the tab for the twelve litres of Glühwein – and the hospital bill for the stallholder, who had been under the false impression that he was strong enough to keep off the babbling beast hopping round his merchandise.

We were sealed off in a hotel suite. Archduke Johann's men removed the spaceship. We rested up for a few days, put our reminiscences on paper and at last discovered that Lord Philip Loghead (the name was of course false) really did work for the Czarist secret service. The Russians too were working on a spaceship. Starting shortly after us, they were to have thrown us in irons on Mars with the help of their agent, so that neither Archduke Johann nor the British Crown should learn that we had reached our target. Unfortunately, the Czarist spaceship had gone down over Knatterottopovsk; of the crew there was no trace.

In the meantime, the asteroid we found DuBois de Bologne on had been located in space: it was called Bellus. Archduke Johann was not particularly happy about the Passenger we had brought back with us (because he provided the proof that the French had sole right of colonization), but – as he was an aristocrat – his noble heart came to terms with it in the end.

Professor Phoney was commissioned to improve his spaceship and set out as soon as possible on a second expedition to Mars. Tom, Dick and Harry received thirty lashes apiece with the cat o' nine tails and were exiled to Togo.

After taking my farewell of DuBois de Bologne, I travelled to London, to report to my publishers. Following my long stay in space I was still rather unsteady on my legs, as I came up the Portobello Road in a cab, and so it was not to be wondered

at that a fit of giddiness shortly after caused me to collapse on the editorial sofa. Louie Lob and Herbie Hudel poured a three-decker Scotch into me and enthusiastically related how the prior announcement of my hair-raising adventures had raised the Flash Review's circulation tenfold. The whole of Fleet Street was green with envy, they reported, and the board of management of the Times were seriously considering the prospect of financial involvement in Lob & Hudel Press. In fact, my chiefs went on, they were currently wondering if the Flash Review should not somehow change its concept and publish thrilling travel tales rather than literary reviews.

The two of them had made a string of plans for me. My next exploit was to be a trip in a submarine, then I was to join an expedition to climb Nanga Parbat, track down the headhunters of Borneo, run the Loch Ness monster to Earth, and (last but not least) travel to South America with a certain Professor Challenger to find a hidden valley where prehistoric dinosaurs were said to live still.

Before I could put two words together Lob & Hudel had fed me another triple-decker, pronounced me the greatest reporter since the late lamented Rudy Hirtpichler, raised my pay to 6s 2d, introduced me to the chairwoman, acquainted me with all the messenger boys, and led me back to my worm-eaten old desk, where four months' work had been piling up waiting for me.

The Flash Review really did develop into a bog topical news-magazine. The title was changed of course; now it was called Lob & Hudel's Flash Report and was written by the best-known sensationalist reporters in the world.

My series on Professor Phoney and the discovery of the asteroid Bellus was a rip-roaring success. It was syndicated in all leading European newspapers, and old Hearst picked it up for his papers too. D.W. Griffith canvassed for the motion picture rights, and the book that eventually came out, ran to 34.8 million copies worldwide (translations and book club editions included).

France founded a new colony on Bellus. The Foreign Legion sent the savages into reservations; holy men brought them the word of God. Before long they had forgotten their idol Lullu.

When the first French space fleet returned from Bellus with huge shipments of diamonds, I was naturally in trouble. As we had completely forgotten to tell our financial backer Archduke Johann about the diamond finds, he sent out a murder squad that liquidated Tom, Dick and Harry in Togo, drove Captain Compart into the Foreign Legion and forced Professor Phoney to take a position as museum attendant in Dar-es-Salaam. As I was financially independent, thanks to the millions I had accumulated, I did a midnight flight, took ship for Tierra del Fuego and bought a big estate there.

Unfortunately stock prices soon began to fall as a result of the diamond glut, and the companies in which I had invested (the Bank of America and Honest Hank's Used Cars) went bust.

Today I live on the Moluccas as a representative for kitty litter, but I have no doubt, that the day will come when great new adventures will summon me to action.

Marathon

THOMAS ZIEGLER



Thomas Ziegler, the pen name of Rainer Zubeil (1956–2004), is generally regarded as one of the greatest talents of German science fiction. With his short stories that began to appear in magazines and anthologies in the late 1970ies, he provided the initial impetus for a new German science fiction that was characterized by topical subjects, local color, near future settings in Germany and socio-political brisance. Also known as head writer of the Perry Rhodan series, translator, critic, editor

THE DAY BEGINS

To dig himself out of the Sand ...

In the distance near the horizon, on the scarred peaks, crowned pearly-white even though smoke pours out and cinders invade the plain, out there where the blue-green and grayish-yellow sky and arid ground meet, the sun hangs like a scabby eye a finger's breadth over the glowing volcano. It is already hot, brutal and dry, totally waterless, and the hoarfrost of the night consists of frozen gas that has long since become vaporized and invisible .

He moves and stretches in the warmth, letting the last grains of sand rain from his silvery skin.

A wind comes up, a whistling breeze, full of dust and gentle coolness. A smell hangs in the wind, the fine scent of a handful of molecules too small to be caught by the hand. Prickly like nickel. Sweet as uranium. Bittersweet platinum, and raw iron. The breeze blows from the horizon, from the depths and cracks in the gorges, where the cold air of the night has laid hidden to climb up now in the clear glare of the morning, under the pounding sun, to flee in all directions.

He lifts his leg. It creaks softly, still stiff from the inactivity of the darkness, from whose black nothingness only his bath in the sand is protection. There it is still fragrant. Warm sunlight envelops him, seeping into every fold of his silver skin which is scaly, like that of a fish, and drinks in the rays in great thirsty gulps, shadowy and parched at first, until finally it begins to shine, and takes up the photosynthetic work of the day.

He glances around, eyeless, but not blind, sees sand and sun, up and down melt together on the scarred peak.

Time for the first breath. Sufficient warmth in the crevices of the skin, the light already swallowed and digested, osmotic pressure in, the cavities of the body, he tenses the drooping sacks and opens wide the slits that part zipper-like and whistling, pump in the air, the traces of oxygen.

He is almost surprised by the ignition.

His legs draw in the sand, burrowing broad trenches, the impatience is a trembling in his entire nervous system. Heat begins to radiate from inside him. Stiffened lubricant becomes soft as jelly. Jets of steam drive pistons. Pressure everywhere. A vent hisses. Chrome-white flakes are expelled to mix with the dusty blanket of the desert. All this as the sun rises. As the day begins. He moves. Two steps forward. The ground rumbles hollowly. Even the sand can hardly swallow the vibrations caused by his massive body. He leaves behind a track. His powerful legs stamp their signatures in the waste until the wind picks up, covering them with dust. Another step. A sideward movement. He describes a large circle, full of restrained power, a circle like that of every other day. The circle is completed as he reaches the pit where he has spent the night, not stopping, now increasing speed. Grains of sand spray to the side. Some of them sparkle in the light, and some of them smell good and arouse his hunger.

Powerfully he shears off from the curvature of the circle, nimbly now, though massive and heavy, letting his legs fly, he falls into a steady trot and glides over the dunes that stretch around him in all directions, flat and swirling with dust, only giving way in the north to plant life and black basalt. Where the scarred peaks adorn the horizon. Again, he increases velocity. Wind howls around him, pitting itself against him, his worst enemy, his only opposition in this world lit by the rays of the scabby sun.

Though possessing no ears, he senses in every cell the hammering of the pistons, the zealously working pumps, the gurgling lubricants and the hissing of the hydraulic steam. Even the smacking sound of opening vents. His skin is now mirror smooth,

*and crime and TV writer, his untimely passing prevented a comeback in the science fiction scene. His most important works are, apart from his stories, perhaps his cyberpunk novel *Alles ist gut* (1983) and the nightmarish alternate world novel *Die Stimmen der Nacht* (1984). Michael K. Iwoleit edited a selection of his best stories for the book series *Cutting Edge*, an imprint of our host publisher p.machinery.*

We have little information about translator Gregory Tracy, except that he was an US student living in Cologne. Author Rainer Zubeil met him in a local bar and hired him as a translator.

slippery, silvery, offering no resistance to the wind that tries unsuccessfully to slide beneath his underbelly, centimeters above the sand. The wind whistles angrily over the smoothness of his skin, around the curvature of his body, under which the legs lift and thrust, none too fast, none unsure, despite their ponderous strength, quick as the wings of a humming-bird.

The sun revives him.

He picks up a scent wafted over from the scarred peaks. Even the ground awakens. Deep in the earth the bubbling lava is pushed back and forth, driven by gasses, hemmed in by solid rock, and streams towards the horizon. He breathes in the sun to drive off the weakness brought on by hunger. He runs faster and faster toward the scarred peaks where flakes of ash paint the pearl-white covering of the summit and slopes.

He is now a missile enveloped by the wind, perceptible only as a speeding shadow. He runs in a droning bolt across the desert. He breathes and filters oxygen from the air. Running. Living.

The day begins.

THE CHAFF, SPREAD IN THE NOTHINGNESS

„And all that after a twenty year flight. In the ice-heart of course, so as not to turn old and gray." The space centurion bored his big toe into his comrade's behind. „And the planet was white as an egg. From a distance. When you were standing on her she was filthy. Snowy, but filthy. Flakes of soot from the blast furnace of the Holy-Threefold-Church. Even the clerics forged swords and produced ground-to-air-missiles, but they wouldn't take off their black frocks, not even in the heat of the forge." The space centurion caressed his comrade's scrotum with his left foot. „We had an easy time of it with them, since their pope was shot into the eternal orbit by the first landing troops. A quick slaughter in the apartments of the New Vatican, a few bombs that bloomed like ice crystals, and a few red patches in the dirty snow. That was '65 on Montblanc." The space centurion nodded and gave his comrade a kiss.

And that seventy years ago, thought Tlile.

She walked past the cabin, using as usual the dead metal of the Zero-Jane that wound its way through the broad corridor and disappeared into the vaporous gray twilight somewhere in front of her. The ceiling light was greenish, like the needlegrass on Myrion Cri, like Mater, the sun that shone down on her at birth.

„You weren't there, you can't imagine how it was for us. Even film with perfect sensitivity can't reproduce what the voids do to a man.“

A new cabin. A space centurion talking to the ego-portrait of a woman. The woman was blond and blue eyed, and her eye lashes fluttered as she peered attentively from her frame down at the centurion, who was powdering his nose, and slowly sorting the holographic photos he had spread in front of himself on the folding table.

„I mean, it's a totally new experience. It's like the first time you sleep with a man or a woman. You sit on the electronic barge covered with armor, inside it's continually clicking and whistling and grinding, and when you cross the border, all of a sudden the stars go out. All the stars. It gets dark. It gets so dark you almost lose yourself.

You know that someplace nearby there's a black hole, you're in the void, and not far away the enemy lurks in the absolute darkness. When you squat there on this barge, and you've even turned off the photon-burner, so as not to be detected too soon, there's nothing else you can do but take your magnetic lance in your hand and feel your way through your assigned area of space. Always in hopes of finding one of the enemy and hurling him into the gravity pit. Always in fear of getting hit yourself, and drifting helplessly away, right into the heart of the black hole. That's the way it was in '23, my dear, and I never saw a single one of the enemy.“ The space centurion smiled up at the ego-portrait.

A hundred and twelve years ago, thought Tlile as she passed the cabin, and maybe this woman is dead by now, if she hasn't accepted the lot of a space centurion's widow and gone to bed in the icy rooms of the cryogenic hotel on Myrion Cri. She

moved farther along the Zero-Jane past the cabins of the space centurions who played and made love and told stories of the Great Wars, whose meaning having become obscure in the passing of the millennia, now only the centurions and politruks could make out.

Tlile tapped the gold headband she wore like an unpretentious diadem. She could now receive the stream of data on the silent wavelength from the comp-agents that untiringly collected information and, with their multisensors, spied out an entire planet.

While we're down here, thought Tlile, inside granite that has taken millions of years to grow, and beside which even the people of Old Earth are like infants.

She went further, her mind on the wind speeds and temperature variations in the Bleachedbone Mountains, where the day had already dawned. Bright and hot, hot enough to cook eggs, and turn water to steam.

Shortly before she came to the great airlock that separated the octopus arms of the underground station from the fat body of central control, she ran into Rino Zle, the space centurion's boss who seemed to hurry through the corridors at all hours, searching perhaps for his life that had escaped him in the light years. Zle was old, three thousand years old, even if his hair showed only a slight touch of gray, and his heart and limbs were still strong. Most of these years were spent in the ice hearts of interstellar ships whose sails billowed in the photon wind, and could even reach Old Earth, if one had ten thousand years time.

„The best days“, Zle called after her as she hurried past him, „were on Lyra. In the forest. There are no forests on Myrion Cri – at least not then. The enemy had hidden himself in the woods thinking himself safe, but we were prepared for that. We sent up a spray ship and dropped a million tons of herbicide 121 down on 'em. The leaves shriveled up. The branches rotted. The trunks turned soft and made a cellulose mush. Most of the enemy drowned in the green muck, and the rest ran out of the Woods right into our arms. That was eleven hundred years ago, and I still remember.“

Yes, Tlile said to herself, pressing her right palm against the airlock bulkhead, that's the way it is with space centurions. They're ghosts from the past, even after the first sleep in the ice heart, they disappear from the world with nothing to hold on to, separated from their lives by decades and centuries. All they have left are their medals and memories.

She thought about Myrion Cri.

Thirty years back.

I've disappeared too. Tlile shivered. I lost thirty years on the flight to Simbatrill, and all my friends have grown old and become strangers. There's no friendship for those who take to the stars. Just short acquaintances because everyone knows it will all be over in the not to distant future.

„A happy workday“, said the airlock door. „The war goes on.“

„The war goes on“, agreed Tlile. The bulkhead opened itself just for her, and as she glanced behind her she saw Zle leaning against the wall staring back at her. His eyes made her uneasy and she turned quickly, stepped into the airlock, and waited impatiently until the second door opened revealing the maze of central control.

It was an arched vault with steel ribs and supporting pillars of special plastic and invisible magnetic fields. Its dimensions were made unclear by the dark, cloudy curtains that separated the vault into numberless individual segments. Tlile was reminded of a shadow land, a place where strange castles float in the air, apparently weightless, separated by the flooding polarized light, supported by girders whose diode covering had the effect of so many eyes.

Tlile tapped her headband and a greenish disc separated itself from the gloom and slid silently toward her. She dropped gratefully onto the anatomically formed disc and was carried through the many levels, recognizing the silhouetted forms of technicians and scholars.

The disc found its way alone, as always at the beginning of a shift, drove through the insubstantial web of the fog curtain and was plunged into light. It was clinically bright in the research center. The walls were white, decorated with control panels, crowded with monitors and displays. Computers arose

everywhere like technical tumors, controlling the movements of comp-agents, recording and sorting the Information received.

Tlile jumped off the disc and saw herself for a moment in the mirrored surface of the holo-tank.

Tlile was fragile and small, with soft hands and a narrow face, as narrow as her almond shaped eyes. Her hair and lashes had a reddish gleam, almost the same color as her nipples, that were protected from drafts and cold by a see-through blouse. Her sprayed-on pants were black as tar, but became transparent between her legs. Her skin was somewhat pale.

„The war goes on, Tlile“, she was greeted by the scholar Ornia, and felt Ornia's moist lips momentarily against hers.

„The war goes on“, returned Tlile and gave the younger woman a quick smile.

„You're looking good, Ornia.“

„I look terrible“, said Ornia, flattered.

Berd – the male scholar with blue and gold tattooed testicles, scurried excitedly among the Instruments as usual – gave Tlile a nod and mumbled something indecipherable.

„There“, said Ornia and indicated one of the monitors. „Punctual as a quasar's heartbeat. You remember we thought – we had lost him, but the comp-agents were able to track him down during the night. Will you take over?“

„I don't think I can“, returned Tlile politely.

She stepped closer.

Desert. Blazing heat. White sand. A sky, green and blue. Dust, wafting over the dunes in long fibrous swaths. And the Marathon.

The Marathon ...

Tlile recognized him immediately, he had grown so familiar during the many shifts she had spent in central research.

The Marathon was a giant. He breathed strength. Natural power. He was silver, and the sun covered him in a flaming aura. If it weren't for the legs, those stamping, untiring pillars that drove this monstrous body across the desert ...

A picture came to Tlile's mind. The express trains on Myrion Cri, the way they crossed the swamps in the north and. the

endless needlegrass-land in the West on the electromagnetic track. Streamlined. Narrowing in front, the pose a single millimeter above the ground, then growing wider in back, like a rocket.

The Marathon had much in common with those express trains.

But he was an animal.

If one could call the things that existed on Simbatrill animals.

The computer blended in figures continuously onto the Monitor.

Almost five hundred kilometers an hour, thought Tlile. That fast. And he's generating about a megawatt. He must still be starved from the night. He's used up all his reserves to fight the cold.

The cold ... Tlile's lips parted and she leaned back as she felt Ornia's hand on her behind. It was twenty degrees Celsius at night on Simbatrill. Like a sunny spring day on Myrion Cri. But for the Marathon this temperature was deadly if he didn't bury himself in the sand. Out there in the open he had to use all the energy he had generated and stored just to keep from freezing. Ornia's hand slid further between her thighs, between the hairless lips of her vagina, and with a soft moan she continued to follow the Marathon's course, although she knew his destination, it was the same every day. Her crotch was now moist, unlike the volcanic aridity of the Bleachedbone Mountains – where the Marathon's ancestors had laid themselves to rest, and where their ponderous skeletons still reached towards the sun like sculptures of iron, titanium, nickel, copper and gold. Tlile leaned against Ornia's hand, against the nimble movements of her middle finger that massaged the softness between her legs, as the Marathon's legs moved untiringly to carry his silver body across the desert.

„Three hundred years ago on Tka Otker“, the scholar Berd said over Tlile's quiet sigh, „I lay on the beach of a red ocean. The ocean was red from the seaweed that floated a few centimeters below the surface. You could walk across the sea without sinking any further than your knees. The seaweed was full

of iron, that's why the dirty, bloody coloring. Our assignment was to find a fast, cheap way to harvest the seaweed and filter out the iron, since the enemy had gotten closer through a retreat at the front. A biochemist whose name escapes me developed a strain of virus that separated the iron from the seaweed and saw to it that the metal sank to the bottom in clumps where big, complicated machines could scoop it up. I stayed to watch the construction of the first planet-to-planet rockets, then I took a transport into orbit and slipped into the Starsailer's ice heart to whisked off to Simbatrill. I still remember that Tka Otker no longer looked red from the air, but gray."

Tiile felt the heat growing in her loins and gave herself fully to Ornia's untiring hand.

On the monitor the Marathon was still held in the crosshairs of the comp-agent, whose lenses were sturdy enough not to be blinded by the strong ultraviolet radiation. The Marathon had reached the foothills of the volcanic Bleachedbone Mountains, and fell into a restless, expectant trot.

ASH FLAKES

... until he can't stand it anymore and screams loud and angrily up at the stone walls, the spiny crest, and the giant craters of the volcanoes that grow in the mountain range like tumors.

He has won strength from the run, the strength of life that leaves him at night only to cause his rebirth when the day comes. A continuous back and forth like morning and evening twilight. Always bringing him in the end back to this place, where he reluctantly slows his pace and doses sulkily, while under his feet sand is crushed and violet lichen-like forms steal swiftly away. Restlessness and as eternal as hunger.

Hunger... He screams again, louder this time, ignoring the faint echo that is no echo, but the call of another who runs back and forth at the foot of the mountains, awaiting the fall of the ash flakes.

He whips around, his skin flashing in the harsh glare, with pounding pistons and hissing vents, filled with longing and

lust for speed and the groaning earth, shaken by the drumming of his untiring legs.

He is fast and heavy, hungry for life, a life that can only be found in the distances of the flat wasteland, in the whistling of the wind on his smooth skin, and in the satisfied gurgling of his enzyme-filled stomach. Silvery, flashing, he trots slowly, not even a hundred kilometers per hour across the fine gravel that has replaced the sand here, offering the violet lichen an infinity of hiding places. From the glowing heat of midday, and the heavy steps of the Marathon.

A rumbling deep in the earth and he picks up speed, crushing gravel to dust and flattening the lichen that begin to seek shelter from the threatening murmuring in the depths. The rumbling is answered by the sky, by the black rounded peaks, the volcanic craters emitting steam and gray smoke. Further down, half-way between the crater opening and the base of the mountain, there where it glistens pearl-white, the earth seems to swell. The whole mountain begins to move. The first ash flakes appear. They shoot high into the air only to be caught and swirled by the wind, finally finding their way to the upper air currents and drifting off in the direction of the desert.

Empty, hungry, he jogs away, silently counting the foamy white balls that seem tiny, from this distance as they separate themselves from the volcanic slag and begin to climb. At first they are few, a thousand at the outside, but their number increases continuously. With every rumble from the volcano a new piece of blue-green sky turns phosphorescent white. At first chain-like, and then like a strange hat, the eerie bubbles surround the volcano's crater.

So that it spits fire.

Smoke and hot steam, lava, thin like soup in which glowing fragments float. The white dome is cracked by the violence of the upward pressure that has gathered deep in the earth, forcing its way to freedom in the form of pillars of fire, gasses, and molten metal and stone.

Sparks are reflected in his silver skin. He speeds away, diving into the wind and the storm that has come up, spraying him

with ash. He runs back into the desert, hungry, ever mindful of the fiery mountain and the volcano's pearl-white cap, now grown dirty from soot and heat. The tiny white spheres are boiled and steamed by the thousands, torn by the thousands by the storm. There are so many that the mass of their bodies begin to dampen the volcano's violence, until it is completely subdued, and the flying bubbles begin to feed.

Sour titanium. Gold, so soft, so cool. The sweet smell of nickel.

His excitement grows with every passing second.

The sweetness of uranium surrounds him like a veil.

FROM ONE OF THESE STARS

They floated out in space. They circled the sun like dull moths with folded photon wings and huge glittering nets of solar collectors that soaked up the light of the scabby sun. From up close its face was glowing and large-pored, with protrusions hanging like thick whiskers from its cheeks.

„The cold of two hundred years“, said the politruk and rubbed his hands in the warm blast of air from the dryer, „doesn't leave the human body so quickly. One is afraid of breaking in a million pieces from tripping or moving too quickly.“ He put himself completely under the dryer and let the drops of water be blown off his bare skin. Here in the relatively cool antechamber, his scrotum and penis were shriveled and shrunken after the warm shower, and Tlile was almost astonished after the long months she had spent with Ornia, without men.

How ugly he is, thought Tlile. A new ghost on Simbatrill. And to think how many are still up there orbiting around the sun ...

„The evacuation went quickly and without complication“, continued the politruk, anal reached for the spray can to dress himself. „The population was well behaved, and the space centuries dutifully kept order while we got the important people into orbit and into the six waiting sailers. The multi-functional

comp-agents cruised at the edge of the system and blew the oncoming planet-to-planet rockets into a thousand different colors that you could see even through the thick atmosphere on Lourd." The politruk sprayed his upper body green, his arms blue, and slipped into a pair of colorless synthetic shorts, adhering to a fashion which no one had remembered for at least three hundred years. „The attacking rockets had been on the way for four thousand years. We know that they came from enemy planet Number 96. Slow, old-fashioned missiles whose chips and squids reacted a lot slower than the electronics in our armed comp-agents. The battle had been raging for two weeks, quite a ways from Lourd, in the orbit of the outer planets, when we realized that our highly advanced four-thousand-years-further-developed technology was helpless against the raw numbers of the attacking missiles. It seems to me the Old Earth doesn't think in terms of centuries, but millennia. They know the complications of an attack that takes four thousand years to reach its destination. I don't know the exact number of rockets aimed at Lourd, but it was enough to eventually destroy our comp-agents. That's the only reason we retreated. We had just located a gap in the swarm of rockets, headed away on the photon wings, and were about to slip into the ice-home when a missile broke through the defenses and obliterated Lourd." The politruk nodded slowly. „That was two hundred and eighty years ago, but to me it seems like yesterday."

Yesterday?, thought Tilile. There is no more yesterday. No today, no tomorrow. There is no more time for anyone who's lain even once in ice sleep and flown from star to star, for two decades or two millennia, without aging a single day.

The politruks up there in the sailers, the notables from Lourd, the space centurion bosses who made the flight, all of them had fallen out of their world to become ghosts.

„The war goes on," declared the politruk.

„The war goes on," said Tilile. Inside she asked herself : What kind of a war is this where a missile takes a thousand years or more to flatten the opponent? What kind of a war is this where the people on Myrion Cri have built and launched missiles for three or four centuries, aiming for stars ten thousand

years away that none of us have ever seen? And when they hit, they destroy an entire planet.

We want to kill, thought Tlile, even if our victims aren't even born yet. And out there in space cold steel and dormant fusion, are closing in, made by people that have long turned to dust.

„The loss of Lourd“, mumbled the politruk, and led Tlile into the living-room of his suite in the twelfth tentacle of the underground station, „has made a sensitive gap in our defense system. We had covered enemy stars 33 to 38 from Lourd, and had a clear path all the way to Old Earth, undisturbed by gravity holes, black clouds and radio storms. We launched maybe twenty thousand rockets before the annihilation of Lourd, and naturally we hope that a few of them will eventually wreak revenge on the enemy planets.

„What if those planets are empty?“, remarked Tlile, and glanced quickly at the two guards waiting at the door, without whom the politruk did not dare to leave his suite.

„What if the enemy found out and evacuated them? What if these colonies have been given up? What then? No one can alter the course of the rockets once they have been launched, there's no ship that can reach them.“

The politruk yawned. „You're quite intelligent“, he remarked.

Tlile closed her eyes. „I'm quite stupid“, she replied modestly.

„Modern warfare“, said the politruk, and yawned again, „has had that problem solved for a long time. The enemy too. The solution is costly, but absolute. We know the enemy's expansion rate to a tolerance of four to five hundred years. Our rockets are only secondarily aimed at the enemy colonies. In reality, we fire at the stars. All stars within the enemy's sphere of influence. Every planet hit, whether populated or unpopulated, is destroyed by the rocket's warhead. In this way, we don't miss any of the enemy's old colonies, and we prevent his having the opportunity to settle new worlds.“

Tlile wrinkled her brow. She felt hot, and the guards who directed their stares at her naked lap irritated her. „But how do you know if our rockets have reached their destinations? Maybe the enemy has destroyed them, and while we sit here

thinking ourselves safe, a new swarm of enemy planet-to-planet rockets is taking off from that very planet."

"It's a matter of repetition", explained the politruk bored. "We don't fire on each planet just once. This method has existed for two thousand years. We repeat the attack at certain intervals."

"I don't understand", confessed Tlile.

"I admire your understanding", said the politruk politely.

"What if that world was actually destroyed? Four hundred years ago? Isn't it a waste to attack them with a new swarm of rockets when they are no longer a threat?"

The politruk smiled for the first time. "It would be a waste if this planet has been destroyed. But who can be sure? Would you want to risk your life on it?"

I don't know, thought Tlile. I don't know. This war... When did it start? Why? When will it end? If it ends... And even Old Earth could already be rubble without our knowing it, while we're still busy building rocket after rocket.

"The war goes on," said the politruk.

"The war goes on," nodded Tlile, and left the room.

DEEP IN SPACE, ONLY TEN THOUSAND YEARS

Like a vortex of gray and rock, here misty-white with gasses condensed in cold and darkness, there shimmering with gold, jagged with debris, a veil, four dimensions wide haloed in the glow of the Stars, lit from the inside by the glare of the one sun, the tangled mass revolves in silent pirouettes through time and space, racked by queer twisting and trembling when the photon wind blows. Violently.

HUNTING FEVER. WHEN GRAINS OF DUST DANCE

... so that nothing gets in his way he avoids the wandering dunes that range through the desert like narrow aisles and cut his speed in half, follows the course of the pearl-white spheres with sharp, attentive senses. Fully fed, pumped full of volcanic

gasses, in the grip of the increasing storm they climb higher, until they reach the air currents that whistle across the mountains and die out deep in the desert in the warmth of the sun.

The spheres float away swiftly, twirling, rising and falling, at this moment still faster than the silver giant. He seems to stretch, to grow flatter, diving beneath the wind that blows against him. His legs touch the ground for an instant to thrust his massive body forward, lift, touch again, while inside him the pistons hammer, filling every cell with their vibration.

His speed increases.

Even the air pits itself against him, but his muscles are steel springs. He notices that the white spheres are now over-head, still too high to reach for, but he is impatient, and opening the cleft in his back, lets the rolled-up tongue flip upward, the jointless arm, sticky, like half-dried glue. His attempt fails, and the tongue with its metal Supports falls back, rolls up and lurks on its catapult.

He keeps running. Grains of sand spray up on all sides surrounding him like a cape, a curtain of sand that grows steadily larger. He is now painfully aware of the emptiness inside him, the chamber of cooled air in which the steel cigar-shaped organ lies waiting to be fed, to be filled.

It is still early, but the night was cold, and has dwindled his reserves. He knows he must hurry if he is not to lose speed, finally coming to a stop, lamed, living from the photosynthetic energy of his silver skin, finally to die, and roast in the sand in the march of the seasons. Disgrace threatens if he is unable to reach the scarry peaks before his last step and lay himself down there. With his ancestors, whose silver skin spreads itself like a blanket over their bones.

It has grown hot, hot as an oven, and the lubricating fluids in his powerful body have grown thin, needing to be thickened by enzymes. In the heat the cold air currents that carry the spheres lose strength. The spheres sink.

They float to the ground pearl-white, out of the grayish-blue and the glare of the scabby sun.

Tender groups of molecules plunge groundward. He catches them. Bittersweet platinum. Sweet uranium. Nickel and copper and silver and gold.

With a volition of its own, his tongue springs out again, wrapping itself around one of the bubbles. The silicon covering crunches apart. Light gasses waft skywards. He tastes uranium. He tastes gold. He tastes ash and sulfur, copper and silver. He pulls his tongue in swiftly, sending the traces of metal to his stomach where, smacking and gurgling, the acids and enzymes begin to work. The tongue speeds upward again, snaring another sphere, two, three, a dozen. The half-organic stickiness of the long, supple tongue bursts the spheres immediately.

He runs.

Every bite strengthens him. His insides are in an uproar as his organic-metallic arteries send the digested traces of metal to his vital organs. Another sphere. The uranium's sweetness even makes him stagger slightly.

His speed increases.

Like a frog snapping at flies, the Marathon snaps at the pearl-white spheres.

Until he is full.

And enough uranium has filled the cigar-shaped organ, and an enzyme has done its work. Ignition. Chain reaction. Atomic processes. The steam in the chamber is heated, expands, and drives the pistons with renewed energy. The legs move in frantic rhythm.

Running.

Slits in the silver skin direct air for cooling into the overheated chamber, whose skin is thick, and hard as steel. The pistons receive more pressure.

The Marathon runs. Sand sprays to the side.

He runs, and still has time until night.

OVER THE DESERT

„As barren as Drog where I stopped on my first flight“, said the space centurion, and peered down through the jet's transparent floor at the dunes that seemed to dance in the warm air. „I was young then, three thousand years ago, and in those days we still attacked the enemy with star sailers, and landed troops

on the enemy colonies. I had spent four hundred and fifty years in the ice-home, still thinking about Myrion Cri, then I woke up and saw this desert world in front of me. The enemy was poorly armed but tough, and ready to fight, and they knew the ins and outs of the desert. The abrasive sandstorms and the plains of fine dust, in which you could sink and be helplessly lost. We attacked them with three thousand men and destroyed their settlements. Those who didn't get away were taken captive. They had to build armed camps in the desert that were then guarded by our comp-agents to keep them from getting reinforcements. I don't know how many days full of heat and dryness went by on Drog until the enemy's guerrillas had rubbed out the majority of our troops. More drastic measures were needed if the rest of us wanted to save our lives. Eve started up with the transports, apparently defeated, but the enemy forgot that we were space centurions. We ignited a cobalt bomb at the north pole and watched while the wind carried the fall-out over the whole planet. That's the way it was on Drog three thousand years ago. I don't shed any tears over that desert planet!"

With a lazy drone the jet speeded toward the thorny outline of the Bleachedbone Mountains. Tlile rested her weight on her elbows, her rear in the air. The politruk kneeled behind her and with slow thrusts, explored the darkness between her legs. The raw skin of his testicles scratched her buttocks, and the movement of his member aroused only fleeting stimulation in her. She thought about Ornia. The lips of her vagina became moister and warmer. The politruk moaned and thrust harder. Suddenly his excited movements reminded her of the chipmunks on Myrion Cri that swarmed over the needle-grass plains twice a year and copulated assiduously, a favored spectacle for the children.

„After the fall of Lourd", explained the politruk, and slowed his movements, „we had first planned to sail to Kyrion Cri, but the space centurion bass remembered Simbatrill and this station, which he helped build five hundred years ago. He knew about the Marathons and the research, and his reasoning sounded intelligent and useful." He groaned again, louder this

time, and Tlile felt the heat of his seed in her. "That's why we're here", he continued, separating himself from her and shuffling into the jet's refreshment cell. „And I'm disappointed to find the station so undermanned."

„I'm sorry", mumbled Tlile, and also rose to clean herself.

„It's all my, fault", returned the politruk genially.

„It's the war's fault", said Tlile, and reached for a towel to blot the wetness on the inside of her thighs. „Just after construction, news of the destruction of Tjuna reached Simbatrill. Half the garrison and most of the scientists were transferred to Linnister, that was to replace Tjuna as rocket launch center. Research stopped, and eventually the rest of the garrison was also transferred. We landed four months ago after a thirty year flight."

„Terrible state of affairs", nodded the politruk.

„You're optimistic", said Tlile politely.

„On board the six sailers in orbit around the sun", reported the politruk and pulled his shorts back on, „are strategically important industries. Computer-controlled rocket factories anal enough electronic hard- and software to equip ten thousand missiles."

To continue the war, thought Tlile. Against planets thousands of light years away. Against an enemy that no one of my generation has ever seen; only the space centurions, the old ones, who in their thousand year flights in the ice sleep have penetrated deep into the enemy's star provinces.

„Tell me about the Marathons", said the politruk.

„I'm sure it will bore you", said Tlile courteously.

„The mountains", interrupted the voice of the space centurion who observed the jet's controls and kept up communication with the comp-agents that swarmed like gnats around the Jet. „We're almost there, and if those peaks were gold this could be Algneta. The mountains there were made of pure gold, and there were these ugly skeleton men there, the natives, as scrawny as scarecrows, and with faces that reminded one of some burned noodle dish. Those mountains were supposed to be sacred, but we needed the gold for the plating on the planet-to-planet rockets we were building at the planet's

equator. It came to a fight, and we had to dirty those gold mountains."

The plundering of the stars, said Tlile to herself as she collected her thoughts. The ground gets plowed up to a depth of five thousand meters. Mountains are carried away, and whole oceans evaporated. And the treasures we dig up are sent on the long trip to the enemy suns, with warheads, and antimatter, and computer programming. When will the first enemy rockets appear over Simbatrill? Or over Myrion Cri? But maybe the comp-agents are already orbiting Mater in their restless search for the missiles that roll in in continuous waves from interstellar space. Maybe Myrion Cri is already broken and burned.

"The war goes on", said the space centurion, who even during love-making had not moved from the politruk's side.

"The war goes on", affirmed Tlile. The Bleachedbone Mountains rose now in front of the jet, flickering here and there with tongues of fire from the craters of the volcanoes. Under them lay the slowly rising gravel hills between desert and mountains. The hills shimmered violet. "Due to the short amount of time our research is not very far advanced, and we still don't fully understand the planet's ecological system. We have concentrated our efforts on the Marathons and their life cycle. Those lichen down there, those violet growths... They store the steam that seeps from the volcanoes and snows to the ground at night with a part of the atmospheric gasses. They also use the carbon dioxide and a few other minerals they extract from the volcanic soot. After they develop, they climb up the mountain and undergo a metamorphosis." Tlile pointed at the pearl-white spheres that clung to the mountainside. The shell of the metamorphosed lichen consists of silicon with a melting point of 1450 degrees celsius. Inside the spheres are, besides steam and carbon dioxide, also several gasses that are lighter than the atmosphere. So they are able, when their time comes, to rise and float over the volcanic craters. Of course many are killed during each eruption, but even more survive than the metal that pours from the craters with the lava. Uranium, platinum, copper, iron, nickel, titanium, gold, silver...

On a good day each sphere stores one or two pounds of metal and is then carried by the wind toward the desert."

"Where the Marathons are waiting", nodded the politruk.

"You have a talent for comprehension", said Tlile.

"A fluke", said the politruk politely.

"Where the Marathons are waiting", affirmed Tlile. "The Marathons feed on the spheres. First of all on the metal, since their bodies consist mainly of organic-metallic combinations. Machine-like. Then on the steam and carbon dioxide which they transform chemically into fuel for the organic combustion motor that keeps them alive in the morning until feeding. And especially from uranium. In the rounded rear section of the body is a natural atomic reactor that is cooled by the air during running, and produces the energy to heat the hydraulic steam that drives the legs. This is why the Marathons are slightly radioactive.

The silicon shell of the spheres contains seeds that settle on the Marathons skin and are carried back to the mountains daily, where they fall off and sprout new lichen.

A continuous cycle. After eating, the Marathons have to keep moving until nightfall to use up the energy they produce. In the evening, they bury themselves in the sand out of fear of the Gold, and to take in the steam that has frozen and falls to the ground as snow. Movement – that's the Marathon's life. If they stand still, the reactor inside them is no longer sufficiently cooled, and they die."

"Life", repeated the politruk, keeping his attention fixed on the monitor screen, on the mountains and volcanoes, the lichen and pearl-white spheres. And on the Marathons racing across the desert in the distance, faster and faster, fully fed and full of strength. "The Marathons remind me more of machines."

"A few things", continued Tlile undisturbed, "are still puzzling. Such as the fact that the Marathons skin can photosynthetically change sunlight to energy. We don't know how this happens or what purpose it serves. And the reproduction. Monosexual, heterosexual? No one can say for sure. And ..."

"You said that each sphere can carry a pound of metal?"

„I admire your memory capacity“, nodded Tlile.

„I have a terrible memory.“ The politruk scratched his head thoughtfully. „Day after day?“

„Day after day.“

„And how many spheres drift into the desert every day?“

„Maybe five hundred thousand“, said Tlile.

„That means two hundred and fifty tons of metal. Uranium, platinum...“ The politruk continued to scratch his head. „Raw material for a lot of rockets. A lot of rockets.“

„But you destroy the Marathons means of sustenance“, Tlile reminded.

„It's war“, said the politruk. „The war goes on. Until victory.“

„The war goes on“, agreed the space centurions.

But what, Tlile asked herself, do the Marathons have to do with our war?

MARATHON

... and so he runs, faster than the wind, warm inside, power in all his limbs; speeds from dune to dune with legs drumming, bent low to the ground, silvery, sucking in the cool headwind in deep breaths. Sand crackles against his skin. He doesn't feel it. Should sand find its way into a vent or into the filter of his breathing slit he spits it out noisily, mechanically, hardly noticing. Should the sand graze his skin too violently, grinding it away, thousands of molecules climb from deep inside his body, diffuse through the artery walls und the thick lower layers of skin to repair the wound. When springs break and pistons fail they are quickly repaired by special strains of virus, the Marathons tiny repair crew that groan under the weight of the collected metal.

He doesn't hear them.

He must keep running, six hundred kilometers per hour now, in a giant arch, pulling a cyclone of dust behind him. He runs on, satisfied, thoughtful, conscious of the spheres that ended his hunger, and still drift and fall around him. There are

only a few left. Hitting the ground, they send a swirl of sand into the air. When they lie in his path he tramples over them, crushing them to tiny fragments and mixing them with sand.

Eyelessly watching he runs, silver under the sun that has now reached its zenith, at home in the desert that erases his tricks and flattens the dunes with the wind, making way for the Marathon.

The spheres are even fewer now, heavy with the weight of the metal they carry, leaking the gas that had held them aloft, they tumble groundward.

The Marathon yells. For himself alone, since he alone hears it, and he runs on, following the curve that leads him deep into the desert where the scarry peaks disappear from the horizon, and the dunes stretch out in all directions.

Two spheres are still held aloft by the wind and accompany him on his run.

Until the evening comes.

THE CHIRPING OF STEEL CRICKETS

The sand was pushed aside, the naked rock came to light, and the walls defended against the shifting sand. Flickering insects hopped from place to place. Here and there beetles crawled through the wasteland on some mysterious errand, swallowed up the desert, and emitted a glass-like fluid that slowly hardened, and was then cut into walls. Humming noisily, their winged cousins dropped from the sky. Crates, drums, containers, and pre-fab building pieces poured forth from their bellies. Ants swarmed everywhere, small compared to the rest of the insect folk, but their numbers ran into the thousands, and halls and houses grew within hours under their iron hands. Deep underneath them the octopus rested in solid granite and awoke from his inactive sleep. The steel spiders spun their webs from pole to pole.

BEFORE THE TWILIGHT

„The volcanic slag has a very low yield.“

„After the spheres – the Marathons? They will have to be counted. A job for the comp-agents. What if we mark them? Shoot a transmitter under the skin?“

„The organization question is up to the computer. The unloading of the star sailers is moving along well. Only the limited number of planet transports is slowing us down. The problem of a water supply for the weapon factories under construction is still unsolved. I suggest drilling. The underground water findings have already been charted.“

„We had more problems on Danae. Swampland, and a planet biochemistry deadly to humans. The boss and a hundred comrades bought it before the first factory was finished. We had to drain the water from half a continent to get to the uranium. The vast oil reserves were of course helpful in the construction of the infrastructure and the base self-support system. In two years the chimneys were smoking and the first planet-to-planet rockets and comp-agents rolled off the production line.“

„You're too concerned about the Marathons. Our job is over. Leave the rest to the space centurions and politruks. There are always things that don't make it through the war unharmed. And the Bleachedbone Mountains are the best place for the works. The Marathons here will just have to go someplace else.“

„For the rape?“

„The planned all-out exploitation of the metamorphosed lichen will not only destroy the Marathons' food supply, it will end the life cycle for both species. No metal-filled silicon spheres, no food for the Marathons. No food for the Marathons, no new spores for the lichen, no more spheres. And then?“

„Two hundred eighty years. Too much time during a war to let them go completely unused. We have to hurry. Maybe there are already enemy missiles on the way to Simbatrill. Our rockets have to be in space before they destroy the planet.“

„Pull your lips over your teeth, otherwise it hurts when I thrust. Simbatrill. I'll only remember the sand.”

„The latest model stored in our production computer is unfortunately already hundreds of years out of date if you consider the time that has gone by during the trip to and from Lourd ... The newest model guided planet-to-planet rocket with anti-matter warhead has highly developed photon burners that can accelerate it to the speed of light in five days. Solar collectors sensitive enough to use even the weak light of the stars supply the electronics during the flight with enough energy for small course changes and battle preparations. Two dozen warheads, also self-steering, high acceleration, protected by certain precautions against premature detection, can be fired off as soon as the target star has been reached. Their explosion is sufficient to wipe out an entire solar system with twenty-four planets of Simbatrill's size, or at least to pound some large holes in the enemy's space defense network.”

„How much usable metal does a Marathon contain?”

„Wouldn't it be possible to use their – uh – organic atomic reactors commercially?”

„I won't sleep with you anymore. Not even out of politeness. I've realized that I don't like men. Especially men like you.”

„At nightfall the temperature drops to twenty-four degrees, and even further in the next few hours.”

„The sand is much warmer near the volcanic chain. Something to consider. A lot of the Marathons probably spend the dark period there.”

„The space transport's crash completely destroyed the cargo. A program defect in the auto-pilot. What do we do without the crystals?”

„You're very attractive.”

„I'm boring.”

„On Yin the colonists refused to finance the construction of rockets. We had to hang three thousand of them by the neck, and still had to fight against sabotage after that. Years later the water tasted like crap and chemicals, and gray fog hung over the big cities. Then we left Yin for good. From then on an armada of comp-agents defended their system, and we sent

forty thousand planet-to-planet rockets into space. Who knows, maybe someday Yin will get an answer, in two thousand years."

"We have to make provisions for continued supplies. If we crack open the silicon shell and get out the metal we could plant the seeds at the foot of the Bleachedbone Mountains ourselves."

"And these skeletons? The Marathons? How many are there? Would it be worthwhile to collect them and melt them down?"

"I abhor you."

"You're too kind."

RENDEZVOUS, ON LAND AND IN THE AIR

... for he too notices that the day is drawing to an end. But the soft scent of the spheres lets him run on with an easy elegance, trotting from dune to dune, allowing steam to escape from a vent. His body is still full of energy, there is still pressure in the pistons, but the time is growing near when he will be forced to change course, and hasten back toward the scarred peaks that disappeared from the horizon hours ago. The pearl-white sphere is tossed in the breeze, losing altitude steadily, nearing the sand and the racing silver giant. Restlessness fills the Marathon, knowing how seldom these moments are and how often he has fruitlessly run into the endless desert after the spheres, though satisfied and full of energy. Only one is left, and the moment comes when he must make the decision he has never considered before. In one motion the Marathon throws himself forward, reflecting the glare of the diminishing sunlight, and reaches out with his tongue for the sphere that falls just at that moment, heavy, and empty of gas, threatening to shatter on impact. Brittle from the flight and the heat. He is just able to catch it and, holding it protectively, pulls it down into his body. No hesitation has slowed his pace. Droning and heavy, his legs carve their way through the sand, carrying him at a fantastic pace across the wasteland. The sphere lies safe and unharmed in the cavity for his catapult,

wrapped in the paleness of the elastic tongue, revealing only a tiny, patch of pearl-white.

The Marathon howls out loud, a scream like the cry of a bird, and the blowing of a whale upon surfacing from the depths of the ocean. High pressure air floods with quick violence into a chamber, driving a rod into the pearl-white sphere without breaking its shell. Still running, the Marathon pumps virus spores into the sphere, crystalline microscopic messengers that carry complex genetic plans and will penetrate the round, undeveloped control centers.

Thundering across the desert the Marathon squeezes the last drops of the thick, sticky fluid through the hollow passage inside the rod. Then the job is done, and he spins around, causing a short dust storm, and rushes back toward the mountains.

He runs as if freed from a heavy load. Shimmering and fast, he speeds forward, a victorious runner in the last few meters of the long road. His thrusting legs are unrecognizable shadows.

Droning fills the desert.

When the Marathon runs.

THE ONLY ESCAPE, A PLUNGE TO THE DEPTHS

With flaming burners the jet drilled its way through the sky that was now gray, and would soon darken completely.

„Come back“, Said the politruk over the silent frequency in Tlile's head.

„No, she retorted stubbornly, and switched off the automatic pilot in order to pull the jet's nose still higher and climb like a space transport in its leap into orbit.

„You are quite honest.“

„I lie frequently.“ Tlile kept her eye on the monitor and saw the small point on the edge of the detector growing larger. Both the station and the construction sight, that was now covered with a flexible dome containing a breathable oxygen atmosphere, were now behind her, and her pursuer was too slow to catch up to her.

„I don't know what you hope to get out of this, Tlile“, continued the politruk. His yawn was a whispering in her thoughts. „It's useless. If you don't turn around, you'll die out there from lack of oxygen. If you do come back, you'll be arrested and brought to your court-martial in the ice-home of a star sailer, if I don't give the order for your punishment before that. You can't accomplish anything, Tlile, and it's a shame to lose your manpower. The war goes on.“

„Without me.“

„Your quite courageous.“

„I'm afraid“, said Tlile, „You'll kill the Marathons.“

„We'll win the war.“

„A few more years research“, explained Tlile thoughtfully, „and we could find you a method to get the metal from the spheres without endangering the Marathon's existence.“

„We have to build rockets. Comp-agents to defend the System. We had to wait two hundred eight years. Now we're not frozen anymore.“ The politruk sounded impatient.

„You're a ghost“, said Tlile. „We're all ghosts. When were you born, politruk? Five hundred years ago? Or four thousand? How many years have you already spent in the ice-home? Myrion Cri is as strange to you now as Old Earth, so what are you fighting for?“

„The war“ returned the politruk, „is not a matter for a few years. Ask the space centurions, they know.“

She heard other voices.

„It was twelve hundred years ago, and we were all sleeping in the ice during ten generations that were born and died on Myrion Cri. Pleja was our target, and it was in enemy hands ...“

„My longest flight was nine hundred years, and the same for the trip back. But my hair is still black, and there's not a single line on my face. I don't even have to think about wrinkles for a long time yet.“

„Ghosts“, whispered Tlile and pulled the jet out of its climb. It wobbled, then shot off high over the desert.

„Come back“, repeated the politruk.

„No“, said Tlile.

„Then you are no longer one of us.“

„Then what am I?“ Tlile concentrated on the controls.

„You are the enemy, Tlile. You're theirs now. You've betrayed us. The war goes on.”

The voices quieted and then disappeared from inside her head. The jet was supersonic, and it wasn't long before she saw the enlarged form of the Marathon on the screen. The Bleachedbone Mountains were growing closer. The Marathon galloped across the wasteland, graceful, and yet powerful.

Tlile slowed the jet and dropped lower. She watched the silver body of the Marathon who sought out the vicinity of the mountains as always before nightfall. She followed him curiously, realized how small the politruk was compared to him. She wished she could have Ornia sitting here next to her in the jet, missed her friend's tenderness. She was lonely in these few minutes when her feelings began to clear, and anger and rebelliousness began to fade.

She couldn't do anything – as the politruk had said. The war went on, on planets, in space, even in the black clouds. The space centurions' sailers crossed the galaxy untiringly, looking for new planets with enough raw materials to supply the factories and comp-agents. A thousand, or two thousand years later the planets went up in flames when the enemy had succeeded in tracing the rockets' course, despite complicated deceptive maneuvers, back to their base.

What am I doing here, Tlile asked herself. Was I going to save the Marathons? From this war that lasts eons, and whose end is nowhere in sight?

She noticed the steel spiders on the mountainside. Their nets were growing, and in a few days would be dense enough to catch the spheres like a swarm of fish and carry them back to the station.

Below, the Marathon left the desert sand and thundered across the gravel and lichen in frantic haste, continued on to the foot of the mountain where the skeletons of his ancestors glittered copper and gold. He ran in a tight circle, digging a ditch with his flat, metallic nose, throwing ash and rock wildly in all directions.

Tlile stopped the jet in mid-air. Astonishment showed on her face. Not a single comp-agent had reported such behavior

during the last four months. The Marathon circled faster. He seemed to know that only a short time remained until darkness and cold set in. Something flashed pearl-white. A sphere rolled from an opening in the silver body and came to rest in the middle of the surrounding ditch.

Now the Marathon had stopped, bathed in the grimy red of the sunset. He dropped heavily on top of the sphere, but Tlile was sure that he had not crushed it, but only meant to warm it, as a mother bird its egg. He lay there, and there was no doubt that he would in this very night grow stiff and die, at the same time protecting the egg: with the warmth of his escaping life.

With a jerk Tlile tore the jet around, ignoring the creaking and groaning of the metal that was overstressed by this maneuver, and shoved the airspeed regulator to the highest scale reading. The jet ripped through the night like a bolt of lightning.

The Marathon was left behind, enjoying the silence.

It was dark and late when the politruk spoke to her again over the silent wave-length, and the detection instruments indicated her position almost directly above the Station.

„It's good that you've come to your senses, Tlile“, said the politruk.

„I'm a fool“, said Tlile.

She switched off all the instruments except the reactor, which continued to produce energy, and quickly became hot during the plunge through the night. Tlile was sick with fear.

„You're quite brave“, remarked the politruk.

„Quite“, whispered Tlile.

ON THE MOUNTAIN

... the Marathon lays in the darkness. His silver skin has become dull and is almost invisible in the night. He lays there, still restless in death, drawing busily with his les that will never again carry the iron body through the day. And though the clammy dew gnaws at his insides, and flakes of gas and evaporation

have slowly covered him, his dying proceeds slowly, and will not end until morning. Under him, protected from cold and the nightly storm that whistles around the summit, covered by his mighty ancestor, the Marathon ripens, to one day raise himself up from the dust, still small, but ready to grow, and climb over the dunes with his thundering stride.

Pigeonholed in a Fishbowl

A SURVEY OF CONTEMPORARY GERMAN SCIENCE FICTION LITERATURE



CHRISTOPH GRIMM

Translated by Michael K. Iwoleit

Christoph Grimm, born in 1985, lives surrounded by key clacking, page rustling and the yelling of children.

Several of his short stories were published in literary magazines and anthologies. He has edited some anthologies himself and is since 2021 editor of the phantastic magazine Weltenportal. His homepage is at christophgrimm.com

It seems like a hardly explainable contradiction:

Perry Rhodan, a science fiction dime novel series, is weekly published since 1961. The latest issues are reliably available in each station bookshop and even in the magazine racks of all major supermarket and gas station chains. With such an ever-present giant of genre literature science fiction in Germany should be in good shape. You would think so.

For science fiction minded readers, however, the visit of a bookshop is frequently sobering. A single bookshelf – in smaller shops likely mingled with fantasy titles – is very often all that is conceded to science fiction literature. Mind you: to the whole of science fiction literature. Trade publishers such as Heyne, Fischer Tor or Piper rely on seasoned classics and franchises from abroad, some established names and now and then the latest Hugo and Nebula award winners. Science fiction from Germany seems to be limited, apart from the latest Perry Rhodan issues, to Andreas Eschbach and Andreas Brandhorst, maybe Brandon Q. Morris, Philip P. Peterson and Joshua Tree.

The German science fiction literature market of course not only consists of just a handful of people. If you leave the bookshops with their rather unrewarding shelves aside and

take an afternoon time to surf the German Web you will discover a remarkably active scene. Small publishers such as Atlantis, p. machinery, Eridanus, Hirnkost, Golkonda, Plan 9, Saphir im Stahl, ohneohren or Wurdack have focused on science fiction. Nova, Exodus, Queer*Welten, Weltenportal and Future Fiction Magazine are regularly published periodicals. Along with anthologies produced by the already mentioned publishers they lay the groundwork for several hundred new science fiction stories published each year.

The „success“ of German science fiction, however, is limited, to say the least. It's like a fishbowl floating on an ocean of literature and only occasionally observed by outsiders. Or to put it less flowery: If a German science fiction novel sales more than a few hundred copies it may already be called a success.

It has been speculated a lot about the reasons why science fiction has such a rough ride in Germany. I assume it's a cross-generational characteristic of Germans to think in categories. While it's true that other countries draw a certain line between serious and entertaining literature as well, it seems to be a typical German quirk to see an insurmountable gap between both. Science Fiction is thus classified as entertainment and pigeon-holed into the same category as Star Trek, Star Wars and of course Perry Rhodan: action-packed space adventures, maybe sometimes appealingly written with solid story-telling skills, but based on a blunt good and evil schematic far removed from reality. It can't be denied that many works of the genre seem, at first sight, to be no more than light, escapist entertainment, and some don't try to be more than that. An intelligent comment on the present age, as American literary critics have identified in the works of Ursula K. Le Guin, Ray Bradbury or Daniel Keyes, to name just a few, seems to be unthinkable in categorized Germany. The idea that the Federal Chancellor or the Federal President of Germany would praise an outstanding science fiction work – as Barack Obama did with Cixin Liu's novels or the life's work of Ray Bradbury – might well be categorized as „fantasy“.

This thinking in categories common in Germany has not escaped large publishing companies either. To avoid associations



Translator Michael K. Iwoleit was born in Düsseldorf in 1962 and lives in Wuppertal today. He was educated as a lab assistant and studied philosophy, sociology and German philology. Since 1989 he is a freelance writer, translator, editor and critic mostly in the science fiction field. Apart from his literary activities he has also worked as a copywriter for advertising and IT industry. He is the founder and editor of InterNova and was the co-founder and long-term fiction editor of its German sister magazine Nova.

with the adventures of Captain Kirk, Luke Skywalker or Perry Rhodan, especially novels with near future scenarios as well as social and technological speculations tend to be published without any reference to the „science fiction“ label. Noteworthy examples are the bestsellers *Corpus Delicti* by Juli Zeh, *Qualityland* by Marc-Uwe Kling, *Blackout* by Marc Elsberg, *Das Erwachen* and *Oxygen*, both by Andreas Brandhorst, *Der Schwarm* by Frank Schätzing oder *Mirror* by Karls Olsberg. The blurbs announce them as „thriller“, „business thriller“, „climate thriller“ – a favorite among novel readers that unfailingly attracts attention – or simply as „novel“.

With regard to the quality of German science fiction it would not be sufficient to refer to Theodore Sturgeon's law that 90 % of everything is crap. Even the acceptable 5, 10 or 20% of the published novels and short stories make it seem as if not only critics and readers, but also the authors have internalize the thinking in categories. Works with ambitious ideas and thoughts often lack accessibility. Entertaining novels, on the other hand, tend to circumvent profundity of thought. If there is one thing missing in much of German science fiction literature, then it's the balancing act of combining inspiring thought experiments with an entertaining narrative style, suitable for a mass audience.

But here and there works like this show up.

Aiki Mira Neongrau

The novel is set in a fictitious Hamburg of the year 2112. The „Duel of the Legends“, a popular e-sports event, is due. The local glam gamer siblings Rahmani are the glamorous heroes of a whole generation. Go „Stuntboi“ Kazumi, a lower class teenager, is given a chance to work at the competition venue, the „Floating Arena“. There Go is drawn into the conflicts of the siblings, whose lives behind the influencer facade are anything but glamorous. As if this wasn't enough, a bomb attack shatters the event and reveals dark deeds.

A plot summary may hint at a thriller-like suspense novel set in an entertainment sector undermined by corruption. In

this regard Aiki Mira succeeded in writing a well-structured novel that, on the other hand, sometimes runs a little too evenly. I assume, however, that Aiki Mira's goal was not to tell a highly suspenseful story. The bomb attack and the games only seem to provide plot vehicles to follow, for a limited time, a whole ensemble of characters whose paths inevitably cross. Neongrau is kind of a future Hamburg sightseeing tour with a focus on individual life stories.

With a rather distanced narrative style Aiki Mira manages to do justice to a relatively large number of characters. Aiki Mira may be our tour guide but we are only accompanied to the locations and characters. There's a certain focus on Go 'Stuntboi' Kazumi, whose search for his identity as a gender-fluid person is one of the topics of the novel, but other characters such as Go's parents Tayo and Ren, the game celebrities Rahmani and the mysterious ELLL are also elaborately depicted in their own story lines.

Noteworthy is the portrayal and especially the literary approach of the year 2112. Aiki Mira has not contented herself with just weaving in a few basic data and technical gadgets, but sets the readers without much explanation into a speculative future. Concise explanations are only provided where Aiki Mira deemed them as unavoidable to keep the challenged reader from being confused. The overall view of the world outside of Hamburg is remarkably coherent, though somewhat sketchy and forces the reader to fill in the blanks.

Neongrau not just claims to tell of the future, it actually does so. This is not our world anymore. It's not even the world of our children and grandchildren. It's the world of our great-grandchildren and great-great-grandchildren. Since Aiki Mira is, as far as I know, not blessed with prophetic gifts, the year 2112 of the novel is of course a speculation. But as Andreas Eschbach has once correctly remarked, science fiction can't make a claim to prophecy, but is actually a comment on the present. Neongrau addresses a lot of topics, none of which becomes dominant. I assume that her intention was to show how everything is connected: the problems of a world that is as densely networked as never before, but also marked by in-

creasing distancing; the truth behind glamorous delusions; the complete disillusionment about the future of a dying world; the search for one's identity. This multifacetedness is what makes this coldly and aloofly written portrait of a, from our point of view, alien humanity so fascinating and far superior to conventional genre literature: no superficial considerations, but deep reflections, based on a thorough observation of our present, about where we – the world, Germany, the society, the individual – might be hundred years from now. The book provides food for thought and draws the reader into a roller-coaster of fascination, some hope, regret and revulsion.

Neongrau demands close attention and active engagement with what we read. Readers not put off by this are rewarded with an extraordinary work which in my opinion is not only a fascinating science fiction novel, but an impressive piece of literature.

Sven Haupt Niemandes Schlaf

A few decades into the future: General Baker is flabbergasted as his missing swarm of electric hornets molds a huge rose out of fresh meat in a cold warehouse. As the military in collaboration with AI expert Bettina Calvin try to get to the bottom of the drone's strange behavior, people all over the world, especially in the giant capital, suddenly seem to be obsessed with flowers. Sculptures, memes, graffiti – flowers are everywhere. At the same time in the vast hospital of the influential PharmaCorp multinational: The bioacoustics work group of Professor Scholz, among them the accomplished IT professional Tuomas Lauri and Lou, discover in the hospital's toilet tanks strange jellyfish- and flower-like beings. A young woman named Eva, who accidentally gets involved with the work group, seem to somehow influence these flower beings as they organize in her presence to more complex units. For both investigator groups a race against time begins as the flowers effect ever more strange and profound changes of reality.

Sven Haupt has already shown in his previous novels that he doesn't care much for genre boundaries and established

conventions. The inclined readership can of course expect to be entertained, but also to be challenged. His approach reminds of progressive music. Haupt's works sometimes read like a Pink Floyd song sounds: unusual, whimsical, intricate – but beguilingly beautiful.

The world depicted in *Niemandes Schlaf* is bleak and seems to be the end result, carried to their extremes, of developments that can already be observed today: People live, estranged from nature and direct contact with others, at close quarters in a huge city, dulled by the constant media stream of government and multinationals that choke off any chance of a deep transformation and evolution in favor of the unswerving status quo of the system.

The novel is retrospectively told by Lou who alternately observes the events from the perspective of the bioacoustics group and the military, referring on the one hand to her own memories, on the other hand to the ubiquitous security footage of a completely monitored world. As already noted in the first chapter, Lou is not alive anymore. How she died and why she is still able to report the events is revealed at the end.

It's not the least the ending that roots this in parts seemingly fantastic, whimsical and spiritually grounded story in a basically conceivable reality – while at the same time distancing itself from it. *Niemandes Schlaf* does not claim to forecast the future, but is deeply engaged with the present, a possible future and inspiring intellectual approaches: „It's not important whether a story is believed. It's much more important that it is told, because nothing is ever forgotten in the universe. A told story gains in reality, that's the crucial point.“

Nils Westerboer Athos 2643

In the far year 2643: On the Neptune moon Athos a monk of the order of cenobites loses his life. No other than the monastery's life-sustaining artificial intelligence is suspected to have killed him. The inquisitor Rüd Kartheiser, an expert for interrogating artificial intelligences, is charged with the investigation. He is supported by his holographic assistant Zack, who is de-

voted to Rüd due to her strict system protocols. As the investigation reaches an impasse, Rüd realizes that he is more than ever dependent on Zack's help. To exploit the full potential of his artificial assistant, he makes a fatal decision with regard to her security restrictions.

The Name of the Rose meets science fiction – this was the unanimous tenor of the press as it became known that director David Wnendt and his production company Seven Elephants are working on a screen adaption of Nils Westerboer's novel (as recently reported, the principal filming has been completed by now, the movie is in post-production and planed to be theatrically released in 2027). The underlying crime story may suggest such a comparison, but to regard Athos 2643 simply as a science fiction variation of Umberto Eco's worldwide bestseller would not do justice to the work.

The novel, that on its plot level skillfully combines science fiction and crime fiction, has much more to offer than is obvious at first sight. Like an onion that is peeled Westerboer's book confronts its readers in each new chapter with reflections about ethics and morals, addresses the influence and use of technology, deals with speculative social developments and ultimately with humanity as such.

The novel is divided into two parts, composed of short chapters that revolve between a suspenseful story line and ramified reflections. The core theme of the first part is the meaning of freedom. The second part more specifically deals with the question how free someone can be who has no goals. These complex themes are concretized in the two main characters Rüd and Zack, initiating further thoughts in the reader.

In sum Westerboer's Athos 2643 is, due to its dense world building and its suspensefully told story, a novel that you only reluctantly put down and only to take in what you have just read.

German Science-Fiction in English Translation Before World War II

FRANZ ROTTENSTEINER

There was a time when German science fiction was often published in American SF magazines, specifically the Gernsback magazines, *Amazing Stories* and later the magazines of the Wonder group. Hugo Gernsback, born August 16, 1884 in Luxembourg, spoke German and studied at the „Technikum für Maschinenbau und Elektrotechnik“ in Bingen until 1904, when he emigrated to the United States. But he selected the stories to be translated for his magazines not himself, his editor C.A. Brandt did. It is claimed that in his youth Gernsback was a voracious reader of science fiction, but he never mentioned what he actually read. In his compilation *The Gernsback Years* (Kent State University Press 1998), where he provided plot summaries and critical evaluations of all the stories published in the Gernsback magazines, Everett F. Bleiler wrote:

„Just what Gernsback read, beyond Jules Verne, is uncertain, since he was not specific, but it would seem reasonable that as a German-speaker educated in a German technical school he would have been acquainted with the work of Kurd Lasswitz. It has been objected that Gernsback never mentioned Lasswitz, but this is not a strong objection.“ (p. 144)

But there may be a good reason why Gernsback never mentioned Lasswitz, even if he knew his work. Gernsback's SF novel



*Franz Rottensteiner was born in Waidmannsfeld, Lower Austria, in 1942. He studied journalism, anglistics and history in Vienna and earned his PhD in 1969. While working as librarian and editor at the Austrian Institute for Construction Research, he began editing several book series of science fiction and fantastic literature, the most important perhaps *Die phantastischen Romane* at Paul-Zsolnay-Verlag and the *Phantastische Bibliothek* at*

Suhrkamp Verlag. In 1969 he got into contact with the, at that time little known, Polish writer Stanislaw Lem and was his literary agent until 1995. Today he is the agent of the brothers Strugatsky for the American market. He has published numerous anthologies and nonfiction books about science fiction and fantasy. Since 1963 he edits the Quarber Merkur, the leading magazin for the critical and theoretical discussion of fantastic literature in the German language area. The European Science Fiction Society awarded him the title of a European Grand Master in 2020.

Ralph 124C41+ from 1911 contains many gadgets and other elements already to be found in Pictures from the Future (Bilder aus der Zukunft, 1878) and Auf zwei Planeten (1897). He may have wanted to appear more original in his ideas, avoiding to draw attention to the fact that he heavily borrowed from another writer. There is also a striking plot device at the start of the text, occurring in Gernsback's novel and another German publication, Albert Robida's Das elektrische Jahrhundert (translation from the French La vie électrique, 1891/92) which appeared in 1899 as No 128 in Kürschner's Bücherschatz, a series of booklets at the time as widely popular as Reclam's Universal Library. The hero of this novel saves, just as Ralph later does, by television and tele-action the heroine from dying in an avalanche. It is Gernsback's character that makes such an assumption seem likely. Jack Williamson stated in his Wonder's Child (p. 53), „He was never a helpful or creative editor, nor even very ethical". And Barry Malzberg, in a dialogue with Mike Resnick, called him a „crook": „(... and a contemptuous crook who stiffed his writers but paid himself \$100K a year as President of Gernsback Publications). This has been clearly established."

Gernsback was of the opinion that being published was reward enough for authors and paid tiny fees, and these often late or not at all.

„Gernsback's venality and corruption, his sleaziness and his utter disregard for the financial rights of authors, have been well documented and discussed in critical and fan literature." (Resnick, Mike; Malzberg, Barry (December 2009 – January 2010). „Resnick and Malzberg Dialogues XXXVI: The Prozi-nes (Part 1)". The SFWA Bulletin. 43 (5): 27–28.

He also utterly lacked in literary sensibility and seems to have been interested only in ideas, but not in their literary execution, and that is reflected in the science-fiction published in his magazines. It is not known whether he actually paid for the German stories translated in his magazines or whether the authors knew at all of those translations. Altogether he published four German short stories: Leo am Bruhl, „Garfield's Invention"

Wonder Stories, January 1934 (tr. of „Garfield's Erfindung“, Die Woche, No. 33/1929), Anthos's (d. i. Leonhard Langheinrich; 1890-1944), „The Malignant Flower“, Amazing Stories, September 1927 (tr. of „Die Blume des Bösen“, in Scherl's Magazin, Juni 1927), Kurd Siodmak's „The Eggs from Lake Tanganyika“, Amazing Stories, July 1926, this issue has a cover by Frank R. Paul for the story (tr. of „Die Eier vom Tanganjika-See“, (Scherl's Magazin, 4/1926) as by F. Cusimak). The stories are routine, the Siodmak tale of gigantic insects was obviously influenced by H.G. Wells; and Max Valier's „A Daring Trip to Mars“ in Wonder Stories, July 1931 (tr. of In kühner Fahrt zum Mars. Eine kosmische Phantasie, published in 1928 by Gutschmann as a chapbook). Everett F. Bleiler commented: „The engineering detail is clearly presented and was undoubtedly accurate and informative in its time. As fiction, the story is not very strong“. (p. 786)

Most often published by Gernsback was Otfried von Hanstein, a prolific author writing in many genres: „The Hidden Colony“, as a 3-part serial, Wonder Stories, January-March 1935 (tr. of Die Farm des Verschollenen, 1924), „Utopia Island“, a 2-part serial, Wonder Stories, May-June 1931 (tr. of Das Rätsel der Drusenkopfinself, 1931, first published 1930 in Der gute Kamerad). Bleiler (as likely) and the International Speculative Fiction Database state that this was a translation of Ein Flug um die Welt und die Insel der seltsamen Dinge (1927), but that is quite a different novel. „Electropolis“ (complete novel), Wonder Stories Quarterly, Summer 1930 (tr. of Elektropolis. Die Stadt der technischen Wunder, 1928), „Between Earth and the Moon“ (complete novel), Wonder Stories Quarterly, Fall 1930 (tr. of Mond-Rak I. Eine Fahrt ins Weltall, 1929), and „In the Year 8000“, a 3-part serial, Wonder Stories, July-September 1932. This novel, which was supposedly translated by Konrad Schmidt and Laurence Manning from the German manuscript, poses a mystery, since so far no German publication has been found. It seems strange that a widely published author like Hanstein should have been unable to find a German publisher for it. Gernsback claimed that it was especially written for him after „Utopia Island“ was well received, but it may well be,

given his debatable publishing reputation, that Gernsback published a story that was not written by Hanstein all, especially as this novel is a marked departure from Hanstein's earlier work. Bleiler speculates that Hanstein may have failed to find a German publisher for it and turned it over to Gernsback. Laurence Manning, one of the translators was at the time an emerging SF author, but if he was the author and not the translator, it seems strange that he kept silent about it. It is easy to see why „Hidden Colony“, „Electropolis“, and „Utopia Island“ found favour with Gernsback. They are gadget stories full of technical wonders. Bleiler found Hanstein's writing not very exciting, but sometimes his ideas fascinating:

„The Hidden Colony“: „The frame situation is confusing and the characterization weak, but the elevation of technology and the symbolism are fascinating. Although Aporius's world is usually taken as the glorification of mechanism and control, a closer reading reveals considerable ambivalence in Hanstein's vision. However, stodgy in writing and presentation.“ (p. 170) „Utopia Island“: „Interesting as a Ralphism, with more material than is indicated above displaying the possible wonders of technology“. p. 170), „Electropolis“: „As reading, competent work, but with no special appeal. Even so, certainly superior to most of the longer works in the pulp science-fiction of the day“. (p. 171) „Between Earth and the Moon“: „The development is fairly realistic, based on German rocket research of the time, but not as valid as Gail's work. On the dull side, although in context, back in 1928, it was probably more exciting“ (p.171).

Since „In the Year 8000“ is so unknown it may be worth to quote Bleiler's summary of it at more length:

The future world is one of high science and automation. The Moon has been colonized and developed for radium mining; there are thought machines of various types;

and an earth tube is under construction. Food production is based on the enormous completely automated farms that Hanstein has favored elsewhere. Politically, there have been great changes. The world is divided into three empires; the Blancos, or Europe, Australia, and America; the Flavos or Yellows, Asia; and the Nigros, Africa. All speak Esperanto, but relations among them are hostile. The Orientals and Africans are ruled by despotic emperors, while the whites have a democratic government. Socially, the culture is slanted toward scientism and rationality, a trend which some deplore. There is an underground movement that urges a return to nature and emotion. Birth control is rigid practiced, and to maintain the population level a sizable proportion of the women is desexualized and turned into neuters. This is done on a voluntary basis. The fertile females are kept as group mothers in what amounts to harems. The story line is concerned with three elements: (1) Frequent, very destructive meteorite storms. The major cities have ray shields against meteorites. (2) An African fifth columnist in Berlin. He will turn off the ray shield turning the next meteorite bombardment, so that Berlin will be destroyed. At the same time the Yellows and Blacks will invade Europe. (3) The love life of Bela Wilson. She has read too many ancient romances. She is torn between two men, the cold engineer in charge of the earth tube project, who cares little for her, and an emotional young man who loves her deeply. Things go off. The meteorite swarm does less damage to Berlin than expected. The invaders are defeated. The earth tube explodes. And both young men are badly wounded; out of the two men advanced surgery makes one man who is suitable for Bela. Together they abandon the mechanistic civilization and go to live on one of the communal farms. Much less pleasant than the other Hanstein stories, with some elements of early racism. Also too much resonance from Harbou's *Metropolis*. (p. 171-2)

Outer space and rocketry were frequent themes in the German novels printed in the Gernsback magazines. Anton Ludwig, „Interplanetary Bridges“, appeared as a complete novel in *Wonder Stories Quarterly*, Winter 1933 (tr. of *Brücken über dem Weltenraum*, 1922). Bleiler found it as literature mediocre at best, but in politics very distasteful and was surprised that Gernsback would print this. „Scientific revanchism and interplanetary exploration. The mode is heavily nationalistic, with repeated complaints about the Treaty of Versailles and the occupation forces in Germany, as well as statements of the need to restore German power.“ (p.14)

Bruno Hans Buerger's *Der Stern von Afrika. Eine Reise ins Weltall* (1921), appeared, translated by Konrad Schmidt and Fletcher Pratt, as „The Cosmic Cloud“ in *Wonder Stories Quarterly*, Fall 1931. The work of this popular German astronomer and science journalist found little favor with Bleiler. He called it „mostly romance and comedy of manners“, „not up to the work of the major German science fiction authors of the period“ (p. 91) and because of the unusual (temporarily?) unhappy ending he speculated that there might be a sequel planned. It seemed strange to an American that there might be a final unhappy ending. Bleiler was more lenient on Otto Willi Gail, whose *Der Schuss ins All* (1925) appeared as „The Shot into Infinity“ in *Science Wonder Quarterly*, Fall 1929, reprinted in *Science Fiction Quarterly*, Spring 1941, and again in *Garland's Library of Science Fiction* (1975) and its sequel *Der Stein vom Mond* (1926) as „The Stone from the Moon“ in *Science Wonder Quarterly*, Spring 1930, and reprinted in *Science Fiction Quarterly*, Winter 1941. „On The Shot into Infinity“ Bleiler wrote: „Like Gail's other work it is fairly rigorous and farsighted in technical resources. As fiction it is commercial, weakly characterized, somewhat melodramatic and clichéd, but not offensively so“ (p. 270), and on „The Stone from the Moon:“ „An odd combination of motifs from Helena Petrovna Blavatsky's Theosophy and serious contemporary astronautics ... A curious medley of elements from occultism and sound extrapolations on astronautics. Many of Korf's activities have turned out to be prophetic“. (p. 271)

It is doubtful that any of these novels of German rocketry had any influence on pulp fiction, for while German science fiction of that period timidly was limited to the solar system, hardly ever venturing beyond Mars, American science fiction already had the whole universe as its playground, flitting unhindered through space, ever after E. E. Smith's „The Skylark of Space" was published as a 3-part serial in *Amazing Stories*, August through October 1928.

But even the most interesting German novel in the Gernsback magazines, Friedrich Freksa's controversial *Druso oder die gestohlene Menschenwelt* (1931), tr. by the renowned SF author Fletcher Pratt, as a 3-part serial in *Wonder Stories*, May-July 1934, seems to have found little resonance. „As an adventure story, routine at best, once the boring introductory section is passed. Otherwise an unpleasant book" (p. 131). Bleiler's distaste for the book seems to have clouded his literary judgment. For while many descriptions in the novel are really hard to take and shocking, Wells' Martians with all the horrors of the First World War (and more), the novel is far from boring, presents some interesting ideas and above all, it is powerful. Manfred Nagl in his *Science Fiction in Deutschland* (1972) has interpreted the novel as anti-semitic. In his reading the alien invaders represent the Jews who appear as insects to be exterminated.

„In retrospect, *Druso* can be seen as a document in the rise of right-wing thought, parallel to National Socialism in Weimar German. The basic plot can be read as a metaphor for the political situation of the day, although it must be admitted that similar plots are not unfamiliar from English-language science-fiction. Present are many buzzwords and concepts associated with Germany of the Nazi period: „The master race," the necessity for individuals to sacrifice themselves for the good of culture, the great benefits created by war, the desirability of blondism, etc. all with a specific Germanic tone that is unpleasant. As is the case with „*Interplanetary Bridges*" by Ludwig Anton, one is surprised that Gernsback would publish such a work. (Bleiler, p. 131)

Contrary to Nagl and Bleiler, Emma Braslavsky, in her recent novel *Erdling* (Suhrkamp 2023), a postmodern tour through German science fiction landscapes, sees the novel as „resistant“(widerständig) which includes Atlantis and such ideas only as a means to make the book more palatable to the general public.

If I am right in my supposition about Gernsback, Kurd Lasswitz may have been a considerable unseen influence on the emerging American science-fiction, although his only presence in translation was the first chapter of his „Bis zum Nullpunkt des Seins“ (1871) as „Pictures out of the future“ in the 20th Century issue of *The Overland Monthly*, June 1890. The full text of this story „To the absolute Zero of Existence“ appeared only in 2008 in my anthology of German science-fiction *The Black Mirror* (Wesleyan University Press). A translation of *Auf zwei Planeten* appeared as late as 1971 as *Two Planets* from Southern Illinois University Press (reprinted in paperback 1976 by Popular Library), and that in the form of the rigorously abridged version by Lasswitz's son Erich, published in Germany in 1948. A few of Lasswitz's philosophical short stories appeared only in the fifties in *The Magazine of Fantasy and Science Fiction* („When the Devil Took the Professor“, January 1953; „Aladdin's Lamp“, May 1953; „Psychotomy“, July 1955), and Clifton Fadiman's anthology *Fantasia Mathematica* (1958, „The Universal Library“), all translated by Willy Ley. Lasswitz was treated by E.F. Bleiler with much respect in his *Science-Fiction: The Early Years*, Kent State University Press 1990.

It might be interesting to have a look at what translated German science-fiction was published in book form before World War II. First, there were the books that were transformed into films: Thea von Harbou's *Metropolis* (1926, first translation 1927, many later editions in English), and *Die Frau im Mond* (1928, first Englished in 1930 as *The Girl in the Moon* and *The Rocket to the Moon*, some later editions), and Kurd Siodmak's *F.P.1 antwortet nicht* (1931, tr. 1933 as *F.P. 1 Does Not Reply* and *F.P.1 Fails to Reply*). There also seems to have been a special interest in rocketry and space travel, as attested by the translations of Otto Willi Gail's *Hans Hardts Mondfahrt*

(1928, tr. as *By Rocket to the Moon*. The story of Hans Hardt's Miraculous Flight, 1931, reprinted in 2011 and 2019) and Friedrich Wilhelm Mader's *Wunderwelten: Wie Lord Flitmore eine seltsame Reise zu den Planeten unternimmt und durch einen Kometen in die Fixsternwelt entführt wird* (1911, tr. as *Distant Worlds. The Story of a Voyage to the Planets*, 1932, reprinted as a Hyperion Press Classic of Science Fiction 1976). A book wholly apart from those themes is Alexander Moszkowski's, *Die Inseln der Weisheit. Geschichte einer abenteuerlichen Entdeckungsfahrt* (1922), a high-brow journey through various philosophical systems that has been neglected in studies of German science fiction. It appeared as *The Isles of Wisdom* both in U.S.A. and U.K. (Routledge, London 1924, Dutton New York 1925). Bleiler's evaluation of Thea von Harbou, F.W. Mader and Siodmak is harsh, in the case of Moszkowski very positive:

Metropolis: „Frightful sentimental rubbish, but sometimes psychologically interesting for its baroque overkill of emotion. Fritz Lang's motion picture *Metropolis*, though based on the same theme, managed to convey a mood that is beyond the novel.” (p. 344)

The Girl in the Moon: „The plot summary does not convey the moronic level of the text. Although the author borrowed the concepts of the German rocket experimenters, she obviously understood little of it.” (p. 344)

F. P. 1 Does not Reply: „A routine adventure story”. (p. 687)

Distant Worlds: „Low quality material. One wonders why Scribner considered it worthy of translation and publication,” (p. 474). In Germany this is considered a true classic of science-fiction, despite its proselytizing religious tone, especially Dieter Hasselblatt who wrote an afterword to a Heyne reprint (1987), was enthusiastic about it.

By Rocket to the Moon: „Despite Atlantis and life on the moon, the author has very carefully used the best scientific and technological data of his day, and much of

what he says seems very modern. Successful as a boys' book" (p. 271).

The Isles of Wisdom: „Back in German, the travelers, now educated by their exploration of the follies of mankind, decide that philosophies are good enough in their way, but cannot meet the complexities of daily life. The irony is finely handled; the argumentation is sometimes both subtle and thought-provoking". (p. 528)

It would seem to me that all of these few translations from the German language had almost no influence on the development of Anglophone science fiction, much less than one man had who was a real influence, the Austrian born artist Frank R. Paul (1884 –1963), who did more than 220 covers for the magazines, including the first issue of *Amazing Stories*, and the cover of the book edition of Gernsback's *Ralph 124C41+*. He illustrated most of the translated stories mentioned here. And he has even been called the father of science fiction art.