Noril'sk

julian A anderson

a Connections tale

Connections is a collection of stories that share a common theme, survival. Based around the discovery of an ancient substance, each book explores a different aspect of the material and how it affects the past, present and future.

The Connections stories can be read in any order.

Whilst we are all having to stay at home, I have created free versions of some of my books. They will remain free until we all allowed out again. I hope you enjoy it.

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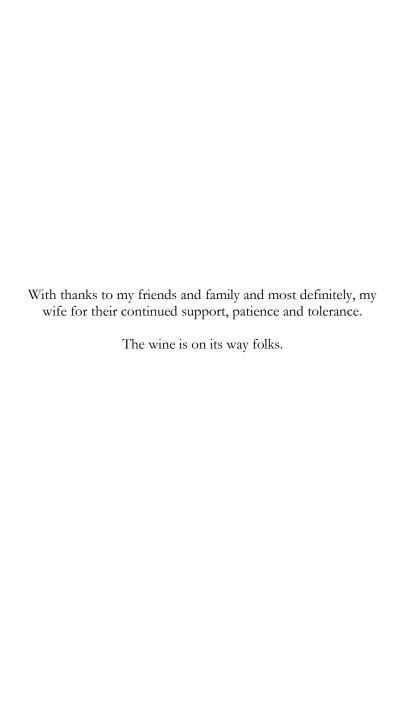
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What if?

Every story begins with a single thought, what if?

2009 saw two auspicious events, the 200th anniversary of the birth of Charles Darwin and the delayed successful launch of the Large Hadron Collider. Whilst these events may seem unconnected, they both embody a human desire for knowledge concerning our origins.

"We are all made of star stuff." Said the American scientist, Carl Sagen. The molecules from which our bodies are constructed were forged in stars and cast into the universe as they died.

It has been conjectured that life was seeded from space, possibly in the form of basic chemicals carried by comets and meteorites. If these find the right conditions, life begins to evolve, from the first single cell organism to the complex web that now envelopes our planet.

Charles Darwin was responsible for propagating the idea of evolution. Each new species to emerge, survives because it has an advantage over preceding ones. Always progressing and becoming ever more complex, to ensure that life continues. However, Mother Nature can be fickle and moving forward may not necessarily be the route she will always select.

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'Hey careful with that.' Came a concerned Hampshire lilt as Angela tried to balance a small red transistor radio on top of an old fashioned cast iron radiator.

'Sorry John, but this is the only place we can get a signal.'

She adjusted the position of the aerial once more to try to get it to act as a counterbalance for the main body of the radio whilst at the same time making delicate turns to the large clear plastic tuning dial. Abruptly, chaotic static was replaced by the sound of Radio 1 blaring out an introduction to the Tony Blackburn show. John groaned. He had brought the wretched thing into work to listen to the cricket on Radio 3 but hopes of whiling away the summer days whilst they were stuck in the university labs, were unceremoniously thwarted when Angela had immediately commandeered it. Instead of the gentle commentary of Peter West to aid his concentration, he found the hours filled with a more distracting form of entertainment.

'When are we going to get something different?' Complained John. I heard they are going to launch a great new station called LBC when I was in London. It will have real people talking about all sorts of interesting things, not just factory made pop.'

'Shut up John. I like him.' Angela snapped.

John closed his eyes momentarily having given up on the latest instalment of their long battle over the radio. Personally, he would have settled for some peace and quiet, but both Phil and Angela seemed to like their music. If you could call it that.

He looked longingly beyond the battered mustard yellow walls and dilapidated 1930s metal window frame, to a large area of short cut grass. There was a sprinkling of students basking

in the morning sunshine, even though the summer recess had begun.

It had been a miserable summer so far and John had been quite happy to find himself confined to the library and the university study rooms, preparing for the latest battery of tests that would hopefully lead to a doctorate. Now, the weather seemed to have improved. The forecasts were predicting temperatures in the high eighties and he longed to be outside instead of being trapped in a stuffy antiquated lab.

John returned his attention grudgingly to the apparatus that he was trying to repair. The main firing pin had become jammed yet again. They were using a vacuum analyser to measure the gas bi-products that resulted from firing at a piece of moon rock. Not the stuff that came from the Apollo missions of course. That was completely out of their reach. This was a piece that had been found in the Antarctic, evidently separated from the moon by some long passed unrecorded event.

John was momentarily distracted by Angela dancing through the narrow spaces in between the workbenches which almost filled the room. John was often distracted when she was around. Her layered fair hair and deep blue eyes together with a passion for skimpy tops and hipster jeans proved a formidable competition for his attention, especially when it was competing with tedious repair work.

A door opened somewhere behind them, and John felt a slight but sustained rush of wind that was followed by a metallic rattle and finally a crash as the radio once more assumed its position on the grey tiled floor. He picked it up, grateful for the fact that it had at least silenced 'Welcome Home' which seemed to be repeated endlessly at the moment.

A slim thirties something figure with a long shaggy beard strode in.

'Good morning.'

Both Angela and John turned to find the familiar figure of Phil, the head of the physics department at the university.

'How goes the repairs?'

'Slowly,' John replied gloomily, 'but we should be ready for this afternoon's test.'

'Excellent and I have another bit of good news.'

Angela and John immediately stopped what they were doing. They had been waiting for some weeks and both had their fingers firmly crossed.

'The Soviet Council is finally sending us a sample of the Noril'sk meteorite. I received a letter from Joseph Shklovski, confirming that the British Embassy is arranging transport and it should be here by the end of next week.'

In response to this announcement, both Angela and John began jumping up and down and cheering. They had agreed to write to the Russian Space Academy to request a sample following a BBC news item about the rediscovery of an unusual meteorite in the cellars of the Leningrad University. The whole meteorite measured almost fifty centimetres across, which was unusually large and had originally been recovered in 1940 close to a small Siberian mining town called Noril'sk, hence the name. The broadcast had explained that its significance passed unnoticed for many years due to the distractions of World War Two and then it became lost amongst a collection of chondrites.

It had been found during an inventory check at a time when the Soviet Union was seeking greater levels of co-operation with the West. Russian scientists were speculating that it fell to Earth around six hundred million years ago, before complex life had evolved. As the meteorite was so large, they offered to send samples to approved universities for additional examination.

Phil allowed them to celebrate their successful application for a few minutes before issuing a reminder that there was work to be done in the meantime. Both Angela and John were working towards their doctorates and Phil had an obligation to publish a paper to justify their departmental budget. He was acutely aware that although work had so far progressed at a

reasonable pace, these two were the only post-grads his department had this year and they would have to complete all the research work.

Phil crossed over to the far side of the room to an area that served as a kitchen. He filled the kettle and lit the gas of a portable camping stove.

'Does anyone else want a coffee?'

Both John and Angela accepted. He measured a teaspoon of powder into three mugs and added some dried milk before topping them up with hot water.

'Here you are.' He said to no one in particular. 'OK, so what's been happening in my absence? Ladies first.'

'I have prepared another week's worth of samples and mounted the core in readiness for today's tests. We also have pieces of high grade iron ore for test firing as soon as John has managed to mend the firing pin that is.' She grinned cheekily at the subject of her remarks.

'Hey!' Replied John in a mock wounded tone. 'It's not my fault the pin won't work reliably. It seems to be jamming every third to fifth test.'

'That's because you are still using No. 3 lubricant. I have told you before. You need to chemically strip the firing mechanism and use No.1. Three is far too contaminated for these conditions. The pin is overheating.'

'What about computer storage?' Asked Phil, trying to quell another argument.

John smiled smugly. 'Ah well, there I have made progress. I managed to find the errors in the code and so the programme will work now. I have also fitted the new 8008 processor and it is much faster. We should be able to get around one hundred pages of searchable data onto each tape.'

'That is good news. Right, I am going to give this to you straight. We have to finish this batch of tests before we can start on the Noril'sk meteorite. Edwards is demanding we produce a draft paper before the autumn conference, and he is unlikely to allow us to be sidelined by our own interests.'

'Why is the director on your back? I thought the university was supposed to be about education, not making money.'

'Oh my dear naive boy, we are facing another round of cuts. Don't you ever read the newspapers? If we cannot improve our reputation, then we are likely to see an axe taken to our budget. Which in turn places greater demands on our private sources.'

'How long do we have?' Asked Angela.

'Two weeks, tops. If we do not submit the first draft by the beginning of September, you could find yourselves with another lecturer.'

The mood in the room, which had so recently been jubilant was now sullen and cold. Not even the usually garrulous John could find anything to say. It was Phil who broke the silence.

'Can I suggest that we meet up again at 2.30? That should give you ample time to sort out the pin.'

Phil drained the last of his coffee and left the lab for the adjacent long anteroom which housed the vacuum analyser. He wanted to ensure that it had been set up correctly.

Angela and John spent the next couple of hours busying themselves with their various tasks and slowly the mood began to lift as their collective deadlines approached. Angela finished first and sat by the window trying to bask in the muted sunlight that penetrated the grimy windows. She began to flip through a copy of the Sun, which John had found on the bus that morning, but it was full of dull news about the Earl of Jellicoe and a visit by Prince Charles to the Bahamas. Not even the gossip pages had anything of interest. Angela put down the paper and let her attention vaguely follow John as he refitted the firing pin. He was not unattractive in a gangly sort of way, although his obsession with wearing the same faded blue jeans and Doors T-shirt for weeks on end, was a little daunting. Even so, she was very fond of him.

John became aware that he was being stared at. 'How did the date go last night then?' He said knowing full well that if it had been successful, Angela would have been talking about it.

'Not too bad.' She replied without enthusiasm. 'Actually, it

was awful. Physicists are so boring. All they want to talk about is their work. Present company excluded.'

'I am glad to hear it.' Replied John. 'So, not meeting up again? He enquired tentatively.'

'No, I don't think so.'

'And what about Steve. Is he still in the frame?'

'No.' She replied sadly but did not expand on her remark.

John smiled to himself as he tested the pin for the umpteenth time and it slid obediently into place. 'Do you fancy going for a beer tonight?'

'This university has a strict no fraternising policy between students and lecturers,' interrupted Phil as he entered the room and crossed to the anteroom door, 'but if you are buying, I won't say no.'

Angela winked at John who looked a little glum.

'Is everything ready to start the tests? How is the firing mechanism?'

'It's working fine. It was just a matter of using the right lubricant... apparently.' John replied with as straight a face as he could manage.

'Good. We can discuss what we are going to do with the Noril'sk meteorite whilst we work.' Phil replied. 'Angela, is the analyser primed?'

'Yes, it's all set up.'

'In that case, you had better hang the 'no entry' sign on the door otherwise we will be getting complaints about health and safety again. Honestly, give them twenty years and you won't be able to do anything without a health & safety assessment.'

Angela went outside to put up the warning sign and then locked the door.

The firing range was housed in the long anteroom reinforced with old stone blocks rescued from a demolition site. At one end sat a steel frame in which was secured an adapted .22 rifle. The samples to be tested were fixed into a movable rig at the other end of the room. Joining the two was a thick glass tube which held the vacuum and a number of cobbled together

pieces of equipment which could sample whatever gasses were produced by the impact. The business end of the tube was also lined with pieces of special paper to capture any resulting fragments. It was all very Heath Robinson but it worked.

Angela checked the sample and ensured that the tube had been emptied of air before returning to the main room where the firing mechanism was positioned.

'OK, I'm firing in three, two, one...'

A muffled bang only just penetrated the ten inches of stone and brick wall that divided the two rooms. Everyone watched a clock on the wall above the anteroom door and impatiently waited for two minutes before Angela was able to return to the analyser. She noted down the readings from several drum graphs before filling the vacuum tube to retrieve several pieces of paper, which had hopefully captured some of the reactions as the sample exploded. Angela replaced these with fresh pieces and then mounted a new test sample.

'Anything unusual?' Phil enquired as Angela returned to the main lab.

She shook her head in response. 'All the readings seem consistent. I'll have a proper look tomorrow.'

'So, what do we want to do with the Noril'sk test? And keep in mind that this will count towards your marks as well as my budget?'

'I think we should start with a simple visual examination.' Answered John as he fired the gun once more.

'That makes sense, if a little obvious,' replied Phil, 'what next?'

'We can do a chemical analysis of the dust left over from the preparation of the samples. That way we will have corroborative evidence of its chemical make up to benchmark the firing tests.' John added.

'Then we carry out collision tests to measure whatever gasses are released.' Interrupted Angela. 'Those tests will also provide data on any chemical reactions it underwent as it entered our atmosphere.'

'That also makes sense, but can't we be a bit more creative?'
'Then how about this.' John winked at Angela. 'We blast it
with other material to see what we can create and then
benchmark any differences against the original tests.'

'Go on.' Phil began to sense that John might for once say something worthwhile.

'Most of the meteorites that fall to Earth are roughly the same age because they date to the beginning of our solar system. So, if we try to simulate those early conditions by crashing different materials into each other to see what chemicals are created, it might give us an idea of how some of the more complex elements were created, perhaps even the chemicals necessary to build life. Now that might be an interesting study.'

'Yes, it certainly would. Angela. Do you have any objections?'

'No, provided we keep back some for corroborative testing, I think that would be a good start.'

'Then that is settled.' Phil concluded. 'Let's get on and finish these tests.'

Phil and John were seated at one of the tables in their laboratory, listening to the latest cricket results. As a Denmead man, born and bred, John had been eagerly anticipating a championship year for Hampshire and in the absence of Angela, he had managed to commandeer his own radio to listen to their latest triumph.

They were sorting through a series of prepared samples of the Noril'sk meteorite whilst they waited for Angela to put in an appearance. The package had arrived nearly three weeks earlier, but the supporting information had been in Russian and it had taken them some time to have it translated. Along with over fifty pages of instructions on what tests could be carried out and reporting procedures, was a single page detailing its

chemical composition. Like most meteorites, it consisted of a mixture of materials. These had been subjected to the extreme stress of cold and heat which had made the sampling process difficult. Nevertheless, they managed to create enough good sized pieces to conduct ten tests. Visually, the meteorite was quite unusual. The iron base had a loose marbling of reds, greens and yellows and this was supported by chemical analysis results which showed that it contained high concentrations of sulphur and various types of crystal. The scientific notes that had arrived with the sample also included some historical information.

The Siberian tundra just north of Noril'sk had been hit by a meteorite shower in the winter of 1940. Once weather conditions permitted the local authorities investigated and recovered a large number of chondrite fragments. It was only when experts realised that the core was yet to be found, that they uncovered the much older iron based meteorite.

What was not mentioned in the notes and which Phil was able to supplement from his own sources, concerned the odd stories attached to the discovery as there often were with unusual or valuable finds. Stories of ghosts which had driven mad anyone who came in to contact with the remains of the meteorite. In fact, even the name had been changed according to one story. The meteorite had actually been found close to a small settlement a few kilometres to the north of Noril'sk. Within a few weeks, all of the inhabitants had either died or been driven insane. The authorities, who were anxious not to attract the attention of Moscow, had buried the remains and claimed that the meteorite shower had in fact struck just outside Noril'sk itself.

So far, it had not affected any of them although as Angela had repeatedly pointed out, it would be difficult to judge in John's case.

At that point, Angela entered the room carrying a file. She wore a concerned expression, which caused immediate alarm.

You are looking worried Ange. I hope you are not going to

give us bad news.' Said John.

'Not bad but very puzzling.'

'I assume you are referring to your chemical verification results. Did you find any differences to the Russians?'

'No, and that is what is puzzling.' Angela responded. 'About 85 per cent is iron. Another twelve consists of a mixture of aluminium, zinc, hydrogen and nitrogen. It also contains sulphur and magnesium and very small amounts of crystal corundum.'

'Rubies,' exclaimed John, 'does that mean we are rich?'

Angela smiled patiently and continued. In total, 99.7 per cent can be accounted for but the remaining amount is a mystery. I certainly do not have access to the equipment we would need for a detailed analysis.'

'Damn!' Said Phil. 'I see what you mean. Any results we get will be tainted by not knowing what that 0.3 per cent is. How do we get around that?'

I am not sure we can. The results will always include a variable.' Replied Angela.

'And you say that the Russian results are the same?' Phil enquired.

Yes, when I added up their chemical breakdown, it also has a missing 0.3 per cent.'

'That is weird.' John interrupted.

'Unless it is part of their test?'

John and Angela looked blank.

'They could either be looking for us to fill the gap or they could be using it as a benchmark to ensure that we are on the ball and that our results are worth considering.'

The mood in the room, which had been jovial and filled with eager anticipation, became dull and lifeless. It had taken months to plan a proposal, which had won them the coveted prize of access to a scientifically important source of research material. Now it seemed as though the inefficiency or duplicity of the Soviet scientists had taken away a rare opportunity for the students to claim a moment of fame. A frantic blur of

favours and contacts raced through Phil's mind as potential sources to serious equipment. It was a forlorn hope for a small university team. Then an idea occurred.

'You know, for three people who are supposed to be among Britain's brightest, we have certainly been slow off the mark.' Phil smiled.

The other two looked puzzled.

'Then let me spell it out for you. Our programme is designed to simulate the early solar system when meteors and comets plunged into the young Earth. To do that we need to identify all the properties and reactions that result when we collide different materials.'

A sign of slowly dawning recognition began to appear on the faces of John and Angela. Phil's own smile became even broader as the mood began to lift.

'So, if we can identify 100 per cent of what comes out of an impact, we should be able to backtrack any chemical reactions.' Angela replied with a sigh of relief.

'Exactly, now shall we get on with it?'

John immediately sprang out of his seat as if it had suddenly become scolding hot and set to work on arming the firing device. Angela went to the anteroom to check that the seals on the vacuum tube were intact and that the sample remained in place.

'OK,' said Phil, 'let's complete the checklist. Test one will look at the chemical profile of impacting an iron based fragment from the Canadian meteorite. John, are you ready to fire?'

'Yes.'

'Angela, is the sample secure and do we have go for firing?' He said unconsciously emulating the language used by NASA.

Angela looked at him with a quizzical face. 'We are set for launch.'

'Point taken but let's keep this serious. John, you may fire at your discretion.'

John pulled a lever which was connected to the firing

mechanism by a wire. There was a muffled retort and the first test was over.

Immediately the tension in the room broke as each set about their allotted tasks. Angela returned to the anteroom to recover the debris from the vacuum tube. John made the firing mechanism safe, whilst Phil checked that the results had been properly recorded.

Angela anticipated spending about half an hour mounting the next sample. As she broke the seal, a slightly sweet and nauseating odour like rotting fruit became apparent. Angela carefully upended a portion of the tube she had removed and tipped the contents into a number of Petri dishes which were then sealed and labelled.

John and Phil busied themselves looking at a long sheet of a paper which they had just removed from the drum graph. The ten coloured inks used to indicate concentration levels of the most common elements, looked initially like the results of a three year old child given some crayons. However, there was one very obvious conclusion that could be drawn from the mess. A small quantity of methane had appeared when they knew none had been present in the samples.

'Any ideas?' Said John expectantly.

'Absolutely none, let's try it again.'

Phil called to Angela who was still in the anteroom, to explain what they would do next and within an hour they were ready to carry out the repeat test. Once the battery of pens had completed their work, Phil removed the paper carefully from the drum and laid it out on the desk. He was soon joined firstly by John and then Angela. As she emerged from the anteroom, Phil noticed that she was looking a little pale.

'Are you OK?'

'Fine, just a little light headed.'

Phil became concerned that something toxic was being produced by the tests. But the paper analysis proved that this was not possible. The most noxious substance present was the methane and that was being produced in far too small amounts

to have an effect.

'Anyone fancy a coffee?' Asked John. He then went over to small wall cupboard and took out a jar of instant. 'I don't suppose there is anything organic.'

'Not in the coffee you buy.' Replied Phil automatically.

John restricted his response to an inane grin.

'You mean that could be decaying to produce methane.' Angela replied, anxious to steer the conversation back onto more constructive lines.

'It was just a thought.'

'And not a bad one either,' replied Phil, 'and that's two sugars.' He interrupted himself as John was about to carry across a cup of unsweetened coffee. 'But all the tests say no. The sample contains no organic matter.'

'Well, there are potentially different forms of life.'

'That's true. There is one way to establish whether there is a direct correlation between the amount of sample material and the amount of methane produced and that is to use the meteorite as both impact test and sample.'

'Sorry, I am not sure I follow.' Said Angela.

'If the volume of gas increases by the same proportion of weight increase, then we know that something inert in the sample is being converted to methane.'

By three o'clock the team was ready to carry out the test. John and Phil were still listening to the cricket on long wave and hardly noticed as Angela came in from the anteroom after completing her tests on the vacuum tube.

'Come on guys. I have been ready for five minutes. We need to get a move on if we are to complete another test before 5.30.'

'Why what happens at 5.30? Oh, I forgot, a hot date with Steve again.' John replied sadly.

'Quite possibly.'

'Where are you off to tonight?'

'That is none of our business.' Phil muttered, his attention still half on the cricket.

John wandered over to his position ready to fire whilst

Angela and Phil made one last check on the recording apparatus. Once more the room was briefly filled with the sound of a muted explosion and both men turned their attention to the radio as Angela returned to the anteroom.

Once the pens had stopped rattling, Phil removed the paper. As he did so, he became vaguely aware that his eyes were failing to focus properly. He was also experiencing an inexplicable sense of angst. Again, his thoughts drifted to the tests they were conducting as a potential cause.

'John, are you feeling all right?'

John looked up from the radio with a puzzled expression. Yes of course. Why?

'Doesn't matter.' Replied Phil and returned to examining the results.

He was soon joined by John and their attention was immediately fixed on the sharp spike that indicated the levels of methane. The spike had doubled in size. Clearly, its presence was a direct result of the impact and the quantities of the sample used. But they were no nearer identifying the origins.

I just don't get it,' John shrugged his shoulders, 'where is it coming from? The sample contains hydrogen but no carbon or carbonates. There is just no way it can be creating methane.'

'Yet there it is. We already know that the Canadian sample is clean, and since both samples of Noril'sk meteorite produced clear methane traces, it must be the source.'

'Then it has to be contamination.' John murmured in an exasperated tone.

'Good point. Angela should know.'

Phil called out but received no response. He tried once more but again was greeted by silence. Phil looked at John and realised in an instant that they had heard nothing from her since the test had finished. They both ran to the entrance and immediately saw a pair of legs protruding from the side of a large timber frame that supported the test equipment. Phil rushed to see what was wrong. Her face, partly covered by hair, was ash white. He checked her pulse. It was strong but racing.

His touched stirred Angela to slow consciousness and once she seemed fully awake, Phil helped her to her feet. A few moments later she was sitting at the table with a hot cup tea in hand.

'How are you feeling?'

'To tell you the truth, I am not sure. It was all very strange.' John has gone to fetch the nurse.'

'I don't want to see a nurse. I am all right. I just fainted.

'People don't just faint.'

'They can if they're pregnant.'

Phil was stunned. 'How?' He instantly corrected himself. 'OK, that was dumb, but how long have you known?'

'Not long, the results came back last week.'

'Steve, I suppose.'

'Well of course Steve.'

'Sorry. Not my business. I was just concerned that the tests may have poisoned you.'

'Poisoned?' Angela looked worried.

'I noticed you were looking a little peaky after the second test and I felt a bit odd myself when I went into the anteroom.'

'How do mean odd?'

'I am not sure. A bit like experiencing a phobia I suppose, a sort of faint irrational fear.'

'But there is nothing in the chemical makeup that is in any way dangerous.'

'There is nothing that could lead to the production of methane, but it's being produced and then there is that missing 0.3 per cent. And now there is the baby to consider.'

'That's why I don't want to see the nurse. If the university finds out...'

'Of course,' Phil replied, 'I hadn't thought of that. Look, you had better say you skipped eating today. That should distract her. I can have a go at you if necessary, to make it seem more plausible.'

'Thanks.' Angela replied as she sipped her tea.

At that moment, John returned out of breath and with a nurse following closely behind.

'It's OK; Angela has explained that she skipped breakfast and lunch as part of her diet.'

'Then she is a very foolish young girl.' Replied the nurse as she took hold of Angela's wrist to measure her pulse. 'Everything seems normal. When was the last time you ate?'

'Early yesterday evening.' Angela replied contritely.

'And what did you have?'

'Some cornflakes.'

'For goodness sake, no wonder you are fainting all over the place. I have no time to waste on girls like you.'

She promptly left the room. Angela looked up at Phil and smiled.

'Now that the drama is over, what do we do now?' Asked John.

'Carry on. That is if you are feeling up to it Angela.' Replied Phil.

'I'm fine. The tea has done me a lot of good.'

'Right then, the problem we have is that we cannot trace any source of carbon for the hydrogen to latch onto to create methane.'

'It's not contamination. The sample came with an unbroken seal and my own tests confirmed the Soviets results. There is no free carbon present.'

'Unless it is that 0.3 per cent of course.' interrupted John.

'Thanks, that's helpful. So, we have seven samples left and we have to reserve three to verify the results.'

'That's right.' Replied Angela. 'But I don't think we should do any more until we have a few answers.'

'Hmm! Probably not.' Phil reluctantly agreed. 'I don't suppose the contamination could be coming from the residue air?'

'I suppose that is possible. We do not have the facilities to create a perfect vacuum.' Replied Angela.

In that case, the only way we can check is to fill the tube with a specified amount of carbon and see how much is left after another test. We can use what was left over from

preparing the samples, so we don't have to use the good stuff. If nothing else, it will confirm whether there is a catalyst in the sample.'

Angela stood up and went to the anteroom. John and Phil could hear her dismantling the vacuum tube and cursing as the remaining catches became stuck. Phil noticed John standing uncomfortably close to him.

'A bit odd that story.'

Phil tried to look surprised. 'What do mean?'

'That tale about her not eating, she usually eats like a horse.' You know girls.'

'I thought I did. Angela is not the sort to go on faddy diets.'

'No?' Phil replied with a tone of feigned ignorance. 'John, take my advice. As far as women are concerned, there are some questions that are just better not asked.'

By 5.15, they were ready to conduct the final test of the day. John went over to the window to turn off the radio. He had had enough of Peters & Lee. Besides which, he had started to develop a headache.

Angela and Phil were standing by the recording drum and the door to the anteroom had been closed. He fired the device for the fourth time that day and was looking forward to meeting his mates for a drink later. In fact, he was simply looking forward to getting out of the lab which was beginning to seem claustrophobic.

John, over here, look.' Phil shouted in his excitement.

Each stared at a blue coloured pen which had been measuring the level of carbon in the analyser. They had started off with two grams and now there was none. The pen made a flat level mark as it traced its path at the bottom of the graph paper as the drum slowly resolved.

'I don't get it.' John complained. 'Look at the methane levels. You would expect them to increase if there was a reaction involving the carbon, but the levels appear to be the same.'

'And yet the carbon has gone.'

'Indeed it has.' Phil replied in a muted tone. 'Angela, let's

have a look at the residues and see if that explains anything.'

Angela returned to the vacuum tube and they listened to her undoing the clasps. Suddenly from nowhere, the room filled with a piercing and soul destroying scream. Phil, who was nearest to the door raced to see what had happened and John heard a soft groan as he disappeared.

'Phil, Ange.' John called out uncertainly.

There was no reply.

'Come on, stop mucking about.'

Again, there was silence. He put down the firing pin, which he had removed from the gun and made his way slowly toward the door. The room seemed unusually dark and forbidding. It was almost as if something sinister was reaching out to him from the most disturbing dreams of his childhood. He tried calling out once more but was greeted with silence. John gingerly sniffed the air to see if something had been produced by the test. There was a faint smell of rotting fruit but nothing obviously noxious. He gripped the frame of the door and slowly stepped inside. On the floor, partially hidden by the vacuum tube he could see Phil's plimsolls and faded blue jeans, but Angela was nowhere to be seen. The sight of Phil's prostrate form overcame John's caution and he moved quickly towards him. The skin felt chilled and damp as John took careful hold of Phil's arm and shoulder to turn him over. As he caught sight of the face, John became gripped in cold terror. He tried to back away but his body would not move. Something seemed to have taken over control of his limbs.

As Mike drove through the pouring rain along an unlit rural road, he unconsciously slowed down to well below the forty miles an hour speed limit in order not miss his turning. The newly installed satnav was telling him both visually and orally that his destination was very close, but he had a healthy distrust of electronic devices, preferring to use his own eyes and ears. However, a combination of impenetrable dark and rain was making this task all but impossible. The journey from London had been uneventful, even dull until he had turned off the A30 at East Stour. Then the trappings of civilisation such as road signs and street lights abruptly ended as he entered the Dorset countryside.

A car behind, probably a local, tooted its horn angrily as it tried to goad him to drive faster. Mike glanced quickly at his rear view mirror to gauge whether it was worth stopping to remonstrate. He thought briefly about stepping on the brakes to give this presumptuous idiot a scare but dismissed the idea immediately with the thought that this unknown yokel would probably not be able to stop in time on the wet and slippery road. The last thing he needed was another insurance claim.

The horn sounded again and to demonstrate his contempt, Mike slowed down even more. But this was not just due to cussedness. The wipers were having great difficulty keeping the windscreen clear of the torrents of water that now almost completely obscuring his view. The headlamps caught a brief and blurred view of a signpost a short distance away. Mike smiled smugly to himself as his speed slipped to seven miles an hour whilst he executed a slow left turn into a narrow single track country lane.

The other car passed to the accompaniment of a rapidly fading sound of another hoot. Mike raised two fingers as a reciprocal gesture, safe in the belief that the other driver could not see him.

He checked the satnav and saw that his destination was not too far away, perhaps a couple of kilometres. He had tried to reset the wretched thing to miles, but the machine remained stubbornly committed to the metric system.

Mike was heading for the ASRI research centre. A posh name for a converted farmhouse where it carried out routine scientific tests. He had been commissioned by CERN, the European laboratory for nuclear research based in Switzerland, to write a series of features about the world's most expensive doughnut where they fired sub-atomic particles at each other in order to discover the nature of the universe. Having encountered a bit of a dull patch whilst they calibrated their recently updated Large Hadron Collider, Mike decided to visit one of the facilities they had been using for preliminary research prior to the planned re-launch. Mike had chosen this place because it was situated in a part of the West Country where he had spent many summer months as a child. There was also another reason for choosing this particular ASRI facility, a matter of a small favour that suited his investigative skills.

The car made its way over the top of a hill and was now travelling down a long slow decline. Mike could see nothing on either side except a dark grey mass of hedge partially obscured by the night and the rain, but his nose made it very clear that he was deep in farming country.

'Jesus Christ!'

The words exploded from his mouth as he jammed on the brakes. Mike briefly felt the car slide before the tyres caught the road again and he came to a firm if ignominious stop at the edge of a steep ditch. Through the rain drenched windscreen, he could see another hedge looming threateningly above him. The road had taken an unexpected sharp 90° turn to the right.

Mike shook his head in sheer disbelief at his luck. He tried consciously to steady his nerves with a couple of carefully chosen expletives before reversing and resuming his journey. Within a few metres, the road turned left once more and began a long slow climb up a hill.

According to the satnay, the farm was at the top of this hill and as he approached the summit, the rain had eased enough for him to see a large house set well away from the road. In front was an enormous gate leading to a garden but this was obviously not the way in. He drove on a short way and found another lane. A minute later he was in a courtyard, his arrival watched by a small heard of curious Holsteins penned up in front of what looked like a milking parlour.

Mike got out and gingerly crossed the yard, carefully avoiding any animal droppings as he made his way to what he assumed was the kitchen door. He rang the doorbell and waited. Nothing happened and he rang again. As no one seemed interested in his presence, Mike tentatively opened the door and was immediately greeted by the sound of alarm bells screaming his presence. The empty kitchen quickly became full of angry faces demanding explanations.

'Sorry,' Mike blustered, 'I didn't realise. I tried ringing the bell.'

'It doesn't work.' Added a middle-aged man unhelpfully.

'Look, who are you and what do you want?' Commanded a stern looking woman.

'My name is Mike Jordan. I understand you are expecting me. I am here to write a piece on your work for CERN.'

'Can I see your invitation letter?' The woman continued in an angry tone, clearly unprepared to believe anything he said.

Mike took out an envelope from his inside jacket pocket and handed it to the agitated woman. She read it carefully and her expression softened.

'In that case, my apologies for the cold reception but the door should have been locked. My name is Dr Pierson. I am the director here and this is Dr Stanton.' The middle-aged man

who had spoken first, extended his hand in greeting. 'This is Ms Bentley our post-grad student.'

An extremely pretty brown haired girl smiled.

'I will introduce you to the others later. Now, can we help you with your luggage?'

'No, I'm fine, if you could just show me where I can put everything.'

'Yes, of course. Claire, would you mind. I am sorry but we will have to leave you to your own devices for a couple of hours. We are busy carrying out some calibrations, but in the meantime, I would be grateful if you could resist any journalistic urges for private explorations. Dinner is at 8.30.'

Everyone then left the room except for Claire who looked a little embarrassed. Mike smiled a smile which he hoped was reassuring.

'I'll go and get my things, shall I?'

'Can I help?' Claire questioned.

'I didn't bring much. I'll be fine.'

'In that case, can I make you a hot drink? It's an awful night.' Thank you. That would be nice.'

Clearly, this awkward introduction to the ASRI team was not going to be productive. Mike collected his suitcase from the boot of the car before returning to the well-equipped kitchen and the sound of a coffee grinder. A short while later, steaming mug in hand, Claire guided him to a large old fashioned room decorated with floral print wallpaper and chintz curtains. Mike put his case down on the floor next to the Georgian fireplace and wondered how to kill a few hours. He did not want to muddy the waters by ignoring Dr Pierson's request concerning uninvited tours so soon after his arrival, particularly after his unorthodox entry.

The rain had stopped and through a small deep set window he could just about make out the garden and the road beyond. Even though it was dark, Mike was sure that it would all be very picturesque but he preferred the bustle of the city. He liked to see people and cars wending their way through

crowded streets. There was something reassuring about being in close proximity to all the necessary services required to maintain a large population. In this place, there was probably nothing but empty fields and a twenty minute car drive to the nearest shop.

Mike turned his back on the window and looked around the room. It had a faint smell of soap and lavender which could not be masked by his coffee. He took a sip and grimaced before setting the mug down on a bedside table.

The room had an overabundance of frills and pastel colours. Even the walls, already decorated with a collection of crudely printed spring flowers, sported a large assortment of different sized pictures. Amongst the prints of yellow ducklings and cute rural scenes was an old oil portrait of a grotesque looking man in 17th century clothing. Mike crossed to its prime position over the fireplace to study the painting carefully but there was no sign of a name of either the artist or his victim. However, the artistic style and the heavy ornate frame gave the distinct impression that this was a genuine portrait rather than a modern copy. Unfortunately, like all front facing portraits, the eyes seem to follow your movements and these eyes had a malevolent quality. Mike turned the picture around before starting to unpack.

It was past 8.30 when everyone finally assembled in the dining room around a large dark oak table. Like the rest of the house, the room had the typical appearance of a quaint country dwelling of the kind hired to tourists. White painted z-framed door; a black ship's beam supporting the ceiling and small wooden casement window with shutters on either side. There was even an old Victorian red brick fireplace of the kind used for cooking.

Mike was the last to arrive and sat in the only remaining vacant chair opposite Pierson and Stanton. First impressions

are an important tool for a journalist and Mike took the opportunity to study his subjects whilst he could. The dining table was quite large and the five ASRI members had made use of the space to divide themselves into three distinct groups. Pierson and Stanton were of a similar generation. However, he knew from their CVs, that she was the older of the two at sixty-five, but she did not look it. Her tied back steel grey hair and clear pale skin emphasised the large blue eyes that denied the years. She had also clearly kept the slender figure he had seen in old biographies despite it being hidden by a thick tweed twin set.

Stanton on the other hand, did look every bit of his fifty-three years. His slightly plump frame and thinning hair were signals enough and the odd combination of tatty checked shirt and fashionable jeans seemed to hint at a bit of a mid-life crisis. Interestingly, he could have guessed that both were connected with science in some way. Each exhibited small and fussy moves that indicated personalities driven by the need for precision. The next pairing were strangers. One was an attractive and stylishly dressed redheaded woman in her early to mid-thirties who vaguely reminded him of the actress Jane Asher but with short cropped hair. The man was older, perhaps in his very early forties. Despite the fact that he was sitting down, Mike could tell that he was tall and well built in a muscular way. In fact, irrespective of his age, he still looked like he could play rugger for England.

The final group was a group of one. Claire was sitting on her own and looked even more attractive in a dress rather than in the baggy jumper and jeans she had worn earlier.

The conversation died a little as his hosts noted his presence and Mike felt compelled to say something. However, before he had the chance, Dr Pierson stood up.

'As you are aware,' she began a little too formally for such a small gathering, 'for the next few weeks we are being joined by a journalist, Mr Mike Jordan. He has been commissioned by our Swiss colleagues to write a series of in-depth features on

their work and he has come to see how we contribute. As this is the first opportunity we all have to meet, I thought it would be a good chance for everyone to introduce themselves. Can I suggest that we start with you?' She looked directly at Mike with such piercing eyes that he began to feel very self-conscious.

'Yes, of course.' Mike began, smiling in his best PR fashion. 'As Dr Pierson has already said, my name is Mike Jordan. I am, what is called a freelance writer which means I work on commission rather than for any particular publication. However, my most frequent buyers are Scientific American, New Scientist and the BBC.'

'Didn't you write an article on how quantum theory and relativity could potentially be combined? I thought it was very incisive.'

'Thank you, Dr Stanton and yes.'

He turned to the rather smart looking red headed woman sitting to his left.

'I am Jan Carraway and I am responsible for the project computer systems and programmes.'

'And I am Brendon Prince, particle physicist and the team's doctor.'

Next came Stanton whose first name Mike learned was Bob and was the projects director as well as Dr Pierson's deputy and finally the gorgeous Claire Bentley who if anything looked even younger sitting next to Bob and Pierson. The introductions complete, everyone helped themselves to the food.

'Dr Pierson.' Mike began.

'Please call me Liz.'

'This all looks quite sumptuous.' Mike indicated the table top which was filled with a choice of hot and cold dishes. 'Do you have your own cooks?'

'Goodness no, this is a secure facility or it should be. No, everything is brought in apart from the basics. ASRI employs a local caterer. Actually, it's quite handy because the driver lives in one of the council houses at the junction. You must have passed by them.'

'It's possible but as it was raining so hard, I didn't notice.'

'Did you notice the pig farm?' Asked Brendon with a smile.

'Yes,' replied Mike, 'that I did notice.' Recalling the distinct smell just before he so nearly parked in the ditch.

'I gather you are doing some interesting work on exotic particles.' Mike enquired, wanting to move the conversation onto more productive ground.

'It's a small part of our work.' Replied Liz. 'We are mainly concerned with providing CERN with routine benchmarking data at the moment.'

'You mean statistics on the results of colliding particles that CERN can use as a standard measure for their own results.'

'That sort of thing.'

But the Large Hadron Collider is over twenty-seven kilometres long. You cannot have anything approaching that size.'

'No, that's true but the results we provide can be extrapolated.'

'Sorry if I am being dim, but could you explain a little more.' In fact, Mike knew perfectly well what ASRI was doing but this was a good ice-breaking opportunity.

'Of course.' Replied Liz with a slight tone of impatience. 'We accelerate particles over substantially shorter distances than CERN, but we are still able to identify standard reactions. For example, behaviour patterns during acceleration, what kind of elements are produced as a result of, I suppose you could call it, crashing things into each other. The data will allow CERN to gauge any differences when they collide particles at high speeds. They can then focus on anything unusual that results.'

'Such as?'

'Whether particles can exist in more than one place in the same instance. That might indicate the existence of different dimensions.'

'Or particles travelling through time.' Interrupted Bob.

'Here we go again.' Brendon raised his eyes to the ceiling with a look of exasperation. 'Give him half a chance and he will

give you his second time-eye theory.'

'Really!' Replied Mike with a smile of reassurance aimed at Bob. 'That sounds intriguing.'

'If you are interested, I can take you through it after breakfast tomorrow. I need to show you some slides.'

'Told you.' Brendon grinned.

'Jan, your work must include some complex modelling if the principle of extrapolation is to work.'

Jan smiled broadly. 'Thank you kind sir, for noticing. Mostly I just get complaints when something does not work the way these brutes want.'

In just a few words, Jan had distinguished herself from the others. She spoke with a cut glass accent that portrayed an expensive education and privileged background. Mike also noticed she was wearing some distinctively exclusive labels.

'Bedales and Paris, but not of course the Sorbonne. Pierre & Marie Curie, I would suggest.' He unintentionally said out loud.

Jan looked impressed. 'Yes, how did you know?'

'Actually, an explanation might make it seem a little mundane. And what about you Claire?' Mike took his chance to talk directly to her. 'What is your role?'

'Support mainly. I work with whoever needs me, but I am working towards my doctorate.'

'I also gather that you are all working on the magnetic frequencies for the upgrade. Presumably, CERN is keen not to see a repeat of what happened at its original launch.'

'As you say, it would be embarrassing if there was a repetition of that particular incident.' Interrupted Dr Pierson, before Claire could respond.

Mike, sensing a potential story, decided to risk damaging his fledgeling relationship with the director and pursued the question.

'As I understand it, the magnetics are essential to the smooth running of the collider, but there have been some concerns voiced that as the collisions have become, shall we say more violent, so the potential for collapse has become ever greater.

Perhaps even leading to the possibility of a mini black hole gaining access to material from outside the confines of the tube structure.'

Pierson smiled a slightly embarrassed smile. I think that is a little fanciful. A failure of magnetics is more likely to result in damage to the tube as it did when the LHC was first fired up.'

'But in theory, it could happen.' Mike pressed the question.

Pierson looked bemused. It could but it is so unlikely as to be negligible. You should keep in mind that it has been running for some years without causing the end of the world. You might just as well forecast us being hit by a meteorite.'

'Nevertheless, you are dealing with a substantial number of unknowns. After all, the whole point of your research is to explore the micro-universe. There is a theoretical possibility that your accelerated particles could trigger changes which could affect how the machine works.'

Pierson again smiled patiently. 'That is an awful lot of coulds. Yes, I agree our work is intended to chip away at the boundaries of known science but it is built on solid foundations. As I said, there were dark rumours about the end of the world when they were building the collider, but we are still here.'

'I take your point.' Replied Mike.

The remainder of the evening passed pleasantly, but despite the seemingly convivial atmosphere, Mike thought that he detected a hint of concern as if his presence was a hindrance to something. Of course, many people found journalists intimidating, nevertheless there had been a few rapidly averted eyes when the conversation touched on certain aspects of their work.

As the others disappeared to their bedrooms or back to work, Mike decided to use the excuse of searching for the lounge to have a cursory look around. At first glance, the building looked like two houses knocked into one, but it was clear from the layout of the rooms that the house had been a single home for most of its life. The oldest part of the structure,

which seemed to date back to the 17th century, was used mainly to house the domestic quarters. The walls were thick and solid with small windows. The newer 19th century part of the house was used primarily for office space and the introduction of modern lighting and space dividers did little to hide its true age.

There was a good sized kitchen which was probably little used from its neat and tidy appearance, an enormous lounge, which served as the communal living area, a dining room and a study/library. Upstairs, as he had learnt on his arrival, there were six bedrooms, three bathrooms and Dr Pierson's private quarters. The décor in the older part of the house had the look of something favoured by an elderly widow or spinster, whilst the newer part was plainer, but all had that faded appearance which can only be achieved by years of neglect. It contrasted strongly with the fixtures and fittings brought in by ASRI, which were not just new but plainly from the upper end of the market. All in all, this seemed to be a quiet and very unusual place in which to find a research establishment.

Eventually, Mike settled in the library. A small television in the far corner was silently entertaining an empty room. He turned it off before looking around the floor to ceiling bookshelves that almost completely lined the walls. Most were filled with science reference books, but there was a small quality selection of fiction and few local history books. Mike chose one of the latter and settled into a comfy red leather lounge chair close to the fireplace. As his eye wandered from chair to table to bookshelf, he spotted a tray with a number of decanters. He got up once more and lifted the tops of each until he detected the distinctive scent of a Laphroaig whisky. He poured himself a large tot and sat down to read.

Time and whisky passed until Mike heard a distant clock strike the hour of eleven and he decided to retire. In the morning, he had an appointment with Stanton about this mysterious second eye theory. As he re-entered his own room with its scent of faded lavender, Mike noticed that someone

had returned the portrait of the grotesque to its original position. He looked at it briefly and shuddered before turning it around once more.

The next morning Mike awoke later than he had planned. The sun was streaming in through the window giving the room a light and airy quality, which he had not noticed the night before. He glanced at the clock on the bedside table. It was just after eight. This was his own fault as he had decided not to set his alarm believing that the thin floral curtains would allow in enough sunlight to wake him naturally.

Given the age of the house, the bathroom proved a pleasant experience. The power shower lived up to its name and there was an ample supply of soft white towels. It even featured a properly lit and well placed shaving mirror. Clearly, ASRI liked to invest in the well-being of its employees.

By the time he reached the kitchen the only people still around were Jan and Brendon. They gave him a warm if cursory acknowledgement before continuing a conversation in hushed tones. From what he could make out, it was not about work.

Mike contented himself with the dregs of the coffee machine and a slice of toast before making his way through the lounge towards the older part of the house by means of a strange narrow hallway that was no bigger than a metre long with a door at each end.

Stanton had set himself up in a room called the barn, which he understood could be entered from the library. But for the life of him, he could not find it. Then he noticed a curtain in the far corner next to the fireplace. Mike pulled this aside and behind it was a door that led into a very large stone walled leanto structure. Whilst it had clearly been modernised, he could understand why they referred it to as a barn.

Stanton seemed to be preoccupied and did not notice Mike

enter the room. This afforded an opportunity to study the man for a while. His first impression was largely substantiated with one difference. Both he and Stanton were of similar ages although Stanton was a little older. Stanton was also slightly taller, had substantially less hair and was a little more portly. However, dressed in a suit he cut a more distinguished figure than he had done the previous evening. Of all the people, he had met whilst working for ASRI, Stanton seemed to be the most potentially interesting character for a writer and Mike was beginning to look forward to exploring the literary possibilities.

'Good morning Mike,' said Stanton, 'did you sleep well?'

'Yes, Bob.' He emphasised the use of Stanton's first name.

It was not that he was old fashioned about that sort of thing but he thought it a little premature to be on first name terms. Stanton was fiddling with a projector. Clearly, he was about to show a film.

'Should I have brought some popcorn?' Asked Mike a little flippantly.

Stanton smiled but said nothing until he was satisfied that everything was ready.

'How much do you understand about the principles of time?'

'Well, I like to think I can grasp relativity, relatively better than most.'

Mike smiled at his own play on words and was a little disappointed to see that Stanton had missed the joke.

'Good. That might save some lengthy explanations. Can you describe what you are seeing when you look at this room?'

Mike was puzzled as to what relevance this could have to a theory concerning the nature of time, but he thought he would enter the spirit to see what happened.

"The walls are beige, there is a large table..."

'Actually, that is not what I meant, but an understandable response. Let me be a little clearer. What can you see in terms of spatial perception?'

'Now I understand.' Replied Mike. 'Well, I can see depth,

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width and height as well perspective.'

What you are describing is three-dimensional space. To see everything in its true relationship with each other requires two eyes. However, what is understood as three-dimensional space is, in fact, a single dimension which we artificially divide for convenience. In fact, space and time are one and the same which is important for understanding how gravity works. But perhaps that is for another time.

Now, if you close one eye and look at this room, you can see everything in front of you all at once. But it is flat. You cannot tell how far away the end wall is or how far this vase is from the other at the end of the table. By opening the other eye, the room gains depth. It is still the same space, but we have a sense of distance or in other words the passage of space between different objects.

We observe time in the same way that we observe this room with one eye closed. We see it as flat. For example, there is a glass sitting on top of the table.'

Stanton then knocked the glass to the floor which broke into a number of pieces as it struck the bottom of a metal bucket which he had strategically placed on the thick carpet below.

'When I knocked the glass, we could both see it fall and then the pieces in the bucket. What we cannot see is the depth, or in other words, the progress from table to floor as a continuous event. What we lack as a natural facility is a second time-eye to view the depth of time. Except that we can in a way. We can use film to capture the path of the glass from table to floor.'

Stanton switched on the projector and Mike found himself viewing the demise of the glass once more. Stanton then froze the film which became a series of overlapping images from table to bucket.

By showing the whole film as a single picture we can see the entire timeline in one go in exactly the same way as we can see space all in one go. Film can of course only show retrospective action. The trick would be to see the glass break before it actually happened by viewing the sequence in reverse. This

requires the equivalent of a second eye. Any questions so far?'

Mike shook his head. He was not sure where Bob was leading him, but the concept was simple enough to any 19th century pioneer of moving pictures.

'To explore how it might be possible to see an action before it has happened, I need you to conceptualise time as a physical thing. So, let us assume that the passage of time is not a straight line transition from one moment to the next but a series of peaks and troughs. Each peak represents a moment in time and each trough the passing from one moment to another. You are standing in a trough. From your perspective, you can never see past the current moment. To do that you need to travel around or indeed, over the peak in order to see the next one. As you move from trough to trough, you mentally piece together each sequence of moments into a coherent story, just as each frame of film joins together to create a storyline. Now imagine that there is a way to fly over the peaks. You could then see all of them in front of you, like taking a shortcut. It would then be possible to see the end result before you had even started. How can we do this?'

Stanton paused to add dramatic effect. This was obviously a well-rehearsed presentation.

'We know that time and space become deeply folded near large gravitational fields and less folded in gravity neutral space. Einstein said that if you travel deep into space and then back again at the speed of light, then relatively speaking less time would pass for the traveller than for the observer on earth. That is because there is less time-space to travel through in the depths of empty space than there is close to a large gravity field such as the Earth. To travel through both at the same speed would require the ability to travel either through or over the top of the peaks. The problem is that we do not have the technology to pursue this idea, but what we can do, is conjecture. In theory, you need a way of travelling through what is essentially another dimension. What you writers sometimes unhelpfully call the fourth dimension.'

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'Wormholes.' Mike blurted out.

'Constitute the way but not the means.' Stanton replied.

'But I still do not understand your idea of the second timeeye.'

In answer, Stanton moved around the table which separated them, took Mike by the shoulders and carefully sat him down on a low stool. His eye-line was just above the top of the table and directly in front of the two vases, Stanton had referred to earlier. One was almost touching his nose and the other was at the far end of the table.

'Close one eye and tell me how many vases you can see.'

Mike did as he was told. 'Two.'

Stanton slightly repositioned the nearest vase. 'Now, how many?

'One.' Replied Mike untruthfully but he understood what Stanton was trying to achieve.

'I want you to open the other eye and tell me how many you can see.'

Again, Mike did as he was bidden. 'Two.' He replied triumphantly.

'Exactly, and why is that?'

Because the second eye provides a slightly different view which the brain uses to create a sensation of depth. It also means that objects which were hidden because they were obscured by a nearer object, come into view. I suppose what you are saying is that if you could create another 'eye' to see beyond the peaks, you could then see other moments of time before you reach them. Forgive me Bob but it sounds like something out of a Victorian science-fiction novel. How could you possibly see beyond the current moment?'

Stanton switched off the projector. 'That's the sixty-four dollar question isn't it and if I had the answer I could be collecting my Nobel Prize, not stuck in a Dorset farmhouse carrying out monotonous tests.'

As Mike left Stanton packing away the projector, he felt a sense of bemusement and perhaps even disappointment. No

wonder Brendon had been so dismissive the night before. Stanton clearly had a sharp mind, but this second time-eye idea was a little hard to swallow. He glanced at his watch. It was now just after ten and Mike wanted to catch up on the time he had wasted.

As an experienced science journalist, Mike knew that he could not simply walk in uninvited on his potential victims. That could easily ruin any delicate experiments as well as bruising delicate egos. That left him with a number of hours to kill before he could meet everyone to agree appointment times.

The only two parts of the house he had yet to explore were out-houses and the cellar. As it was such a nice morning, he decided to choose the former to explore first.

The yard in which he had arrived the previous evening, was rectangular. The house ran the length of one side and a high four-bar steel tube fence formed the barriers on two other sides. The final part of the rectangle was formed by a small and large out-building. Opposite the house and beyond the fence was a concreted area bounded by a long single storey building. It had a pitched roof coursed with red slate tiles and below were four split doors. Clearly, this had been designed to house small farm animals, such as calves or pigs. To the right of this was a small paddock where he had seen the cows on his arrival. It was empty now but a double doored building and a large tank next to it seemed to indicate its function as a milking parlour. On the left hand side of the yard was a large two storey high corrugated iron barn for wintering cows and beyond that a pole barn for storing feed.

Mike was intrigued by the fact that they were keeping animals and wondered whether ASRI was branching out into agricultural research. He had not come across any references to this during his research and so he decided to investigate. Immediately next to the house on the left was a small single storey building which looked like a piggery. Wiping a grimy window, he tried to discern what was inside. He could just make out a series of maps and breeze block walls but little else.

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He tried the door but it was locked and so he gave up in favour of easier options for exploration. He then made his way back to what he had assumed was the milking parlour. Peering through a high window, he saw a row of pipes and pens. His assumption had been correct just as it was about the long low building behind the fence. It had a number of small breeze block pens clearly intended for animals.

Mike made his way past the pole barn and found a working slurry pit that was three quarters full. Next to this was a vile smelling mound of silage buried beneath a large amount of black plastic sheeting held in place by old car tyres. It was altogether intriguing. This place was supposed to be a research facility dedicated to particle physics and yet it had all the fixtures and fittings of a fully working livestock farm. Clearly, this would form an avenue for further investigation.

As Mike made his way around this complex, he found himself at the back of the single storey animal building that faced the yard. In the middle of the pale Dorset sandstone facade was a single green heavy duty metal door that looked entirely out of place in this rustic setting. Mike made his way towards it and was just about to explore how the door might be opened, when a female voice brought him to a sudden halt.

'Mr Jordan, just what do you think you are doing?'

Mike turned around to be confronted by an angry looking Liz.

'Forgive me,' Mike began, 'a journalist's natural curiosity.'

'Then can I suggest that you curb your natural instincts. I thought I had made it clear last night. This is a secure facility. I may as well be frank. None of us are particularly happy with your presence. We have important deadlines to meet and you are a distraction which we can ill afford.'

T'm sorry, I did not realise. I thought my visit had the full support of ASRI.'

Liz looked a little uncertain for a moment. If am sure it does but I am the director of this facility and I am the one who is accountable if our work is not finished on time.'

'Then how can I help to ensure that both you and ASRI HQ get what they want?' Asked Mike, trying to resolve the situation. He was not ready for a confrontation, at least not yet.

'By ensuring you arrange for your little tours and questions to fit into our schedule.'

Mike watched Liz stride off towards the direction of the yard. It had been a long time since anyone given him a rocket. Then a thought struck. The last time he had seen Liz, she had been in her office at the front of the house. He was sure that no one had opened the kitchen door since he had left the house ten minutes ago. This was such a quiet place that he would have certainly heard its dry squeaky hinges. So how did she know where he was and where had she come from. Mike unconsciously looked up and found half an answer. Mounted on the roof was a camera and as he looked around, he found more. Liz had said that this was a secure facility, which meant that there could be no more unplanned excursions.

Mike returned to his room which seemed to have become drab and cold once more now that the sun had moved out of line with the window. He intended to have a quick wash before lunch and then if there were to be no interviews this afternoon, an exploration of the countryside around his new home seemed in order. Mike opened the top drawer of an antique tall-boy to get himself a fresh towel and was about to visit the bathroom when he stopped short. A sense of extreme irritation welled up inside as he noticed that the old portrait was once more staring at him with its dark disturbing eyes.

'Keep your bloody opinions to yourself.'

The owner of the voice slammed down a half empty glass on the bar top and stormed out of a nearby door. As with the other customers, Mike had been listening intently to the increasingly heated conversation whilst trying to feign disinterest. Unlike the others however, he recognised one of the protagonists. It was Brendon. Mike had been able to make little sense of what had sparked the dispute or hear much of what was said. It was only when the voices began to carry across the small but crowded pub lounge that he noticed Brendon cosseted with a shifty looking man, deep in conversation. Mike did not like the look of him and decided to keep a low profile. The landlord had also joined in the exchange on a couple of occasions and was looking increasingly sour. Then abruptly the discussion escalated into a short but furious shouting match. As the door closed, Mike returned his attention to his lunch and the local newspaper as the other customers began their whispered conversations. It did not take much intelligence to guess the subject.

The Oak was a traditional pub, which even served a good pint of bitter. Most country pubs these days seemed to have been turned into trendy gastro bars selling pasta, sushi and cold yellow water masquerading as stylish Eastern European lagers. He was glad to have found such a promising place so near to the farm and briefly toyed with the idea of finding a cheap bicycle to cover what would be a good twenty minute walk.

The ASRI team was busy with the first of the CERN projects which meant that he had been squeezed into a one hour slot at the end of the day. He therefore decided, to occupy

his time by exploring the local area. This part of Dorset provided a good example of the English working countryside with a population of dairy cows and the occasional pig farm spreading themselves over the lush hills and valleys. Mike had taken a couple of hours to walk through a well-kept wood to the top the local viewpoint called Duncliffe hill. As was usual, it boasted a view of thirteen counties. He briefly wondered what it was about the number thirteen that made it such a popular claim. However, irrespective of the numerical accuracy, the hill did command fine views across the picturesque Blackmore Vale.

Then to sate his hunger and thirst, Mike made his way along a narrow country road, past the farm to the crossroads he had encountered yesterday but this time he took the road towards the village of Stour Provost. It was a small and quaint place, consisting of a single street lined with sandstone houses. From the siting of a postbox and a rather inappropriately positioned bow-window, it seemed as if one had once served as a post office and small shop, but these were long gone. Apart from a church and its adjacent hall, the only community facility was the local pub. As it was well off the nearest main road, it had escaped the dubious results of popular demand.

Mike drained the last of his beer and returned to the bar, intending to use his journalistic skills to find out the reason for Brendon's outburst.

'Pint of Badger please.' He said as he caught the landlord's eye.

A full glass was duly set down on a beer soaked cloth.

'Sorry for the fuss earlier. It's usually very quiet here.'

'I have no doubts. Actually, I wonder whether I should be the one to apologise.'

'Why's that sir?' Replied the landlord in a puzzled tone.

'Because I am staying at ASRI where that young man works.'

'So, you're one of them scientists.' Commented a white haired old man sitting close by. From his strong dialect, he was evidently a local.

'No, not at all,' Mike replied, 'in fact, I am here to investigate them.' Mike decided to prevaricate a little to see if anything came of it.

'About bloody time,' replied the old man, 'are you the police?'

'Why do say about time. Is there something wrong?'

'Well,' the old man growled, 'I don't suppose they are doing anything illegal, but it seems a rum place for all them physicists to be. I mean what's out here for them and what do they want with a bunch of milkers. They planning to launch them into space or something?'

The landlord decided to intercede at this point, evidently thinking that the conversation was becoming too confrontational for a potential repeat customer.

'Come on now Seb. Leave the gentleman in peace.'

'I don't mind answering any questions I can. In fact, I am quite interested in some background information about the house. How long since it was last a farm?' Mike was eager not to have a likely source of information cut short by local manners.

'Well now, that is a question.' Replied the landlord.

Mike bit his tongue firmly and the landlord continued.

'When did the boys leave? Must be at least five years ago now.'

'Old Jake's boys,' interrupted the old man, 'must be five year at least. He was a dairyman, a proper one. Built the farm up from scratch and made a good job of it despite all the meddling from MAFF.'

'Defra.' The landlord corrected.

'Same barking buggers.' The old man replied icily.

'So why did they leave. Financial trouble?' Mike racked his brains for any farming stories he could think of apart from BSE and foot & mouth.

'Lord no.' Replied the old man. 'They took after their old dad. Made a packet and got out.'

'From ASRI? As you say it does seem a bit strange for that

type of company to come to a place like this. Did Brendon never explain?'

'The only thing I ever heard him talk about was horses.' Replied the landlord in a sour tone.

'Oh, I see.' Said Mike, even though he was not sure that he did. 'What about ASRI themselves? Surely, they met up with people from the community, if nothing else, just to be good neighbours.'

'There were a couple of meetings in the beginning. When we heard that a science lab was coming to the village, there was a lot of concern.'

'There would be naturally.' Mike tried to appear sympathetic.

'They said they were doing agricultural research, but then I googled some of the names of the people when they came and knew that was a load of hogwash.'

At least the presence of the cows had now been explained, but Mike reflected that for a top-flight organisation dealing with commercial and probably politically sensitive information, they had been particularly dim in not realising that such a flimsy story would be quickly exposed.

'What about the house itself? An old place like that must have quite a history. Who else has lived there?'

'It used to be two places. A widow from London lived in the cottage for close to thirty years. Never knew the husband. He died not long after they moved here, but she was a nice old stick. Worked up at the school for many a year.'

'And what about before then?'

'Colonel had it. Can't remember his name. He moved in just after the war.'

'Everington!' Volunteered the landlord.

'Nay Harry. That was the name of the man responsible for the hauntings.'

'Hauntings?' Mike spluttered over his pint.

'You haven't heard the story then?' Added the landlord.

Mike shook his head.

'1640s it were, during the Civil War. Rupert Everington was

the illegitimate son of the Duke of Denton. A bad character. He had the original house built as a place to meet his friends. Terrorised the parts round here for many a year before he went too far and they hanged him.'

'What for?' Mike asked.

'Torturing young women.' Added the old man. 'Had trumped up charges of witchcraft made against them. Then he would secrete them away to his cellars and that would be that. Poor buggers.'

'The final straw came when he killed the daughter of the vicar. The locals rioted and attempted to burn down the house.' Said the landlord. 'Everington tried to get a local magistrate to condemn them as rebels but he turned out to be a close friend of the vicar and had him arrested.'

'Sounds like a nice character, but how does the haunting fit in?'

'Ah well, that's also an interesting story.' Answered the old man. 'For a gert long time, the house was peaceful until the war. Some Jerry got lost on his way to Bristol or Bath and dropped his load in the garden. The Army were all over the place for about a week. It was after that the problems started. The whole house was owned by one family then. They had a number of youngens and one of them in particular, started seeing ghosts.'

'Of Everington?' Mike interrupted.

'Lord no,' replied the old man, 'of the vicar's daughter.'

As Mike approached the farm's kitchen door, he could hear raised voices and wondered what the commotion was about. At least they sounded cheerful, which was a blessing. After his fruitless conversation with Stanton and the even more fruitless one in the pub, Mike thought that a change of mood would be very welcome. Instead of gleaning hard information on ASRI, all he had to show for a day's work, were ghost stories and

nonsensical ideas on the nature of time.

No one noticed as he slipped into the kitchen and stood quietly in the corner listening. Everyone was there apart from Liz Pierson, but the main protagonists seemed to be Jan Carraway and Bob Stanton. Just a few moments in the kitchen was sufficient to revise his initial views of a convivial atmosphere. This was turning into his second full-blown row of the day.

'The five grams will be more than enough.' Replied Bob to a part of a conversation that Mike had not heard.

'But that still does not get around the basic problem of time. Our schedule is already tight, and we simply don't have the spare capacity for any personal research.' Said Jan crossly.

'Time is not the issue here. We have a contractual obligation. All directors are specifically obliged to encourage productive personal research where there is an obvious commercial advantage for ASRI. This has clear commercial prospects and so we have to make time.'

'And just how am I supposed to provide the programming. All the specs will have to be completely rewritten.' Jan was by now becoming very agitated. 'Look, I admit this is a golden opportunity and I would be more than glad to support you but just not before our deadlines. If you could only wait until after the re-launch.'

'By which time we will have lost months of valuable research time. ASRI is not the only company receiving samples.'

Mike could contain his curiosity no longer and crossed to where Claire was standing, quietly observing the proceedings.

'What's it all about?' He whispered.

Claire turned to him and whispered back in a conspiratorial fashion.

'CERN has sent the samples they want testing and amongst them was a piece of the Noril'sk meteorite.'

'Good god! You don't mean the one that caused that major incident back in the seventies.'

'Yes, that's it.' Claire replied. 'It seems that CERN gained

access to a small supply and want to use it as part of their primary tests. They think it will guarantee a lot of international media coverage.'

Anyone vaguely connected with science journalism was aware of the Brezhnev era's attempt to warm up the Cold War through scientific cooperation. It had been a disaster with scientists across the world becoming victims of a mysterious illness after coming into contact with the meteorite fragments. There had even been a number of deaths. A few political hotheads had used the incident to further their careers by labelling it a communist plot. The Russians took umbrage and withdrew all remaining samples and finally the UN implemented an international ban on further tests.

'Jan,' Brendon interrupted, 'suppose we use the Hadron test programme. That should require very little modification since its basic principle is simply to ensure we can accurately measure the results of colliding sub-atomic particles.'

For a moment, Jan said nothing. She kept her head bent low, staring at the floor as if deep in thought.

'I am not saying that it can't be done. I am just saying I don't have time.'

'If it just a question of time, I am sure we can all pitch in.'

But it is not just time is it.' Jan replied plaintively. 'There is also the safety factor.'

'I think you can leave that to me,' said Brendon, 'and we can always use the...'

'Dr Prince.' The unmistakable voice of Liz Pierson cut through the heated debate demanding everyone's attention. 'Precisely what do you think you are playing at?' She made a quick eye movement in the direction of Mike.

Everyone except Claire turned their attention towards Mike and at least one face became very red. It was clear that they had failed to notice his entrance as they hotly debated their topic.

'Oh for!' Stanton visibly tried to quell his impatience. 'Liz, haven't you managed to clear him yet? According to my instructions, Mr Jordan is to be given full access.'

'May I remind you that I am the director of this facility.'

'And may I remind you that I am in charge of all scientific research, which includes meeting CERN's scientific requests. On that subject, any discussions about carrying out tests on the Noril'sk are over. Both Jan and Brendon will draw up a programme according to my specifications.'

Mike had been carefully watching the discussion from the sidelines and so was the only one to notice Liz pale when Bob mentioned the name of the meteorite. When she spoke, her voice was barely audible.

'Bob, can you explain please?'

'Explain what?'

'Your reference to the Noril'sk meteorite.'

'Sorry Liz, of course you don't know. CERN have decided on a big media event to launch their new upgrade. To guarantee interest, the first test will be on a Noril'sk sample. They have asked us to supply the bench testing.'

For a while, Liz said nothing as if she was trying to come to terms with something deeply shocking.

'That is absolutely out of the question.' Liz replied, her voice struggling to maintain any kind of composure. 'Who authorised such a request?'

'The board of directors. It has full authorisation from both the UK and Swiss authorities.'

'I see,' she replied coldly, 'and what are these tests to consist of?'

'Standard collisions at the sub-atomic level.'

Liz turned from white to bright red and looked as though she was about to explode. 'This is outrageous! CERN was created for serious research, not frivolous PR stunts.' She interrupted herself as a sudden thought occurred. 'What has this got to do with Jan and Brendon producing testing plans?' The standard programme is already in the system.'

Because I want to extend the standard programme. This is an opportunity for us to carry out some unique studies rather than just bread and butter commercial work.'

'NO!' The word came out almost as a scream and Liz looked for a brief moment as if she was in the grip of a panic attack but then quickly appeared to regain her self-control. 'That is out of the question. I will not authorise any such tests.'

Bob finally lost his patience. 'Liz, as I have just said, I am in charge of scientific research, you are responsible for ensuring we have adequate facilities, a full workload and enough tea to keep us going. I see no point in prolonging this conversation. Jan, Brendon, my office, now.'

Mike watched the three depart, leaving Liz behind who appeared to be both angry and embarrassed in equal measures. Seeing that there was no one left for her to rail against, she also left the kitchen.

'Well, that was quite a scene.'

Now it was Claire's turn to blush as she realised that she was the only face of ASRI left to justify their actions to the media. Mike could see her dilemma and decided to make things easy for her.

'It's OK. I will not be using this in anything I publish, so you don't have to explain if you don't want to. But if you do, it is strictly between us.'

Claire visibly relaxed and Mike decided to capitalise on the situation.

'Is it usually as volatile as this?' He smiled to reassure her.

'No, not really.' Claire replied. 'There are disagreements of course, that's the way science works, but everyone got along well until.'

'That little incident over the Cadlington results.'

'Yes.' replied Claire shyly.

'I would like a cup of coffee; would you like one?'

'Please.'

Mike crossed the kitchen to the coffee machine which sat next to the sink. He poured water into the filter section and filled a small container with coffee beans. It made a loud but satisfying grinding noise as it whirred into action.

'How long have you been with ASRI?' Mike asked.

'Just about two years.'

'Which means that you arrived just before everything blew up in the press. Must have been one hell of an arrival.'

Claire smiled. 'You could say that.'

'From what I can recall, there was a Dr Battley and two others who were involved. They were working for Cadlington Laboratories and were carrying out medical tests on a new drug. Four people died and ASRI was implicated in helping to cover up the fact that some of the test results had been falsified. They nearly went bust, didn't they?'

Claire nodded her agreement but said nothing. Mike poured some coffee into two cups and then went to the fridge to fetch some milk.

'Sorry, I am not trying to pry. It's all just useful background information.' Mike noticed that Claire was looking very uncomfortable. 'Actually, I was much more interested in what you are doing here. A doctorate I think you said. What's your major?'

Claire seemed to brighten at the change in subject. 'Muons mainly.'

'Muons?' Repeated Mike.

'Essentially they provide an alternative to neutrons to probe condensed matter.'

Mike swiped his hand over the top of his head as a gesture to show that he did not understand.

'OK. A muon is a short lived sub-atomic particle which gets into the spaces in between atoms, very useful for probing magnetic fields. A bit like a spacecraft exploring the space in between planets.'

'With the sun as the nucleus.'

'Yes.' Replied Claire and then she realised that Mike had understood more than he had let on. 'Men!' She responded with a tone of mock contempt.

Feeling that he had now gained her confidence, Mike decided to risk raising a potentially trickier subject.

'Bob is quite a surprising character.'

'What do you mean?' Replied Claire a little defensively.

'Well, at first I thought he was quite a gentle sort, perhaps even timid, but when they were arguing about his areas of responsibility, he appeared very determined.'

'Bob is a very dedicated and intelligent man. He is also passionate about his subject. Quite wasted in a place like this.'

T'm sure he is.' Mike was a little surprised by her vehemence. 'By the way, have you heard about the ghost?'

'Everyone has heard about the ghost,' interrupted Brendon as he walked back into the kitchen, 'although none of us has seen it.'

'But do you believe that such things exist?'

'No, of course not, but it gives this place a bit of colour. Are you going to write a piece about it?'

'Hardly my field, but I am intrigued. The landlord at the Oak said it was a young girl, the daughter of the local vicar.'

'Lizzie Striker, that's right. Although I would be careful in taking anything Harry has to say too seriously. Jan and I did a bit of digging when we...when we had a bit of time on our hands. It's actually quite a curious ghost. Only seems to appear at certain times.'

'How do you mean?'

'Well firstly, the locals would have it that it did not appear until the last war. But in fact, that is not true. The parish records say it first appeared when a mob tried to burn down the house in 1642. Then there seems to have been nothing for three years but in 1645 a small force of Roundheads arrived. Dorset was a Royalist area and there was a skirmish. Part of the original house came under cannon fire and for several weeks after that, the locals were afflicted with strange apparitions and not just of a young girl.'

'What else was seen?' Mike asked now thoroughly engrossed in the tale.

The records are not so clear about that. It just mentions an evil force. The next time there is any mention of apparitions was in 1941 when a German plane dropped a bomb in the

cesspit. It caused some minor damage to the foundations but that was all. However, a young girl called Carrington started to see the ghost. I gather she was quite a strange and disturbed young lady and so it was quite some time before she was believed.'

'But they eventually did because some old chap told me that a Colonel moved in after the war.' Mike recalled his pub conversation.

'Either that or they just wanted to take her away.'

'And this Colonel saw nothing?'

'You know the military mind.' Brendon replied.

For a moment, the discussion died as Mike stared into the depths of his coffee cup. There seemed to be a tenuous connection between the sightings, and it was often such connections that led to an interesting story.

'Do you know what I find fascinating about all this?'

'No, what?'

'All the sightings appear to be linked to structural disturbances of the house.'

The following morning Mike was allowed into the cellar for the first time. This was the heart of the ASRI facility where all the interesting work was carried out. As Mike made his way down an old stone staircase towards the control room, he was struck by the area's singular appearance. From the structure of the space, it was evident that several rooms had been knocked through to create a single large area which had then been redivided with a series of modern partitions to create a complex of labs, office and storage space as well as the main control room.

The control centre itself consisted of a large rectangular room divided by a long arc shaped table. It was quite unlike anything Mike had seen during his many years of travels around the world of science. 17th century architecture competing with

21st century technology gave the room an almost eerie appearance. Sandstone brick and a lime plaster ceiling bordered by black ship beams, peaked through an array of heavy duty humidity and air conditioning systems which criss-crossed the ceiling to manage the heat output of a large array of computer banks and other electronic equipment, as well as a bewildering number of visual displays. But the most distinctive thing about the room was a pervasive smell of hot pepper resulting from the constant heating of plastic insulation.

Jan was sitting behind the arc desk, busy ensuring the computer programmes were running smoothly and that all the systems were behaving as they should. Bob was also there, dividing his time between micro-managing Jan and Brendon who was in another part of the building. Finally, Claire was running around ticking off a seemingly endless list of checks. The only one not present was Dr Pierson whom he had not seen since she had stormed off the previous day.

Mike was keeping a low profile. He knew he had been given privileged access only as a result of the spat between Bob and Liz and he had no desire to spoil that situation. As he sat on a bar stool tucked away at the back of the room, he tried to work out what everything was for, based on what he knew about the CERN layout.

Essentially the accelerator was a large and powerful magnetic circular tube through which they fired sub-atomic particles. The electro-magnets ensured that the particle did not collide with the sides of the tube as it raced around and around picking up speed until it reached 99.9 per cent of the speed of light. Then they would collide it with another particle racing in the opposite direction for maximum impact. The resulting matter and energy could then be measured. In theory, this would help to answer some fundamental questions about how gravity works, where all the anti-matter went after the universe was created, what happened in the first fraction of a second when matter and energy consisted of a single and as yet undefined element. And finally, where was the missing ninety-

six per cent of the universe which scientists speculated was there but could not see.

From his knowledge of the history of CERN, Mike knew that strange things could happen when particles are collided at high speed. They could slip through wormholes into other dimensions or even through time. Exotic particles could be created that had not existed since the first picosecond of the universe. It was even possible for the same particle to be in two places at once. At least that was the theory.

Mike shook himself free from his musings and began to study his surroundings more closely. Directly in front was the long arc desk on which were mounted all the controls to manage the electromagnet field inside the accelerator and to oversee all the computer systems At the back of this were a series of LED screens which portrayed in visual terms all the information fed from the sensors on the billion or so reactions that were recorded and measured by a bank of powerful computers that lined the walls. The two things he could not see were the accelerator itself, which presumably was buried in a field somewhere nearby and the power source to run everything. They could hardly take the energy required from the national grid and yet there was no sign of a generator or power control system, both of which would have to be quite substantial.

Jan resumed her seat in front of the control desk whilst Bob hovered behind her.

'All systems are clear. Brendon, can you confirm that the power system is ready?' Said Jan into a microphone attached to her blouse.

A disembodied and slightly hollow voice came over the speakers embedded in the ceiling.

'Yes Jan. All power systems are ready to go.'

Jan turned to face Bob who nodded his approval to start the test. Jan pressed a button on her keyboard and Mike noticed a number of screens reacting to what was going on in the accelerator. Then it was all over. All the hours of careful

preparations, build up and systems checks and everything was complete in a moment. The one major difference between the ASRI accelerator and the CERN was the absence of sound. The LHA sounded like a jet engine as it steered particles around the twenty-seven kilometre tube, but here Mike had heard nothing although he could feel some vibrations. No one would tell him how large it was, muttering 'commercial confidentially' in response to any questions. However, he had reasoned that it had to be within a short walk and yet far enough away for sound and vibration to mostly dissipate before it reached them.

The screens were temporarily filled by a variety of graphic images which both Jan and Bob ignored, presumably because they were more focused on managing the next test. Some screens clearly displayed particle tracks and others represented energy levels. However, there were many more, which did not seem to offer a clue as to their purpose. But of one fact, Mike had become increasingly convinced as the afternoon progressed. Despite knowing the same tests were being carried out on different samples, one had stood out as producing some very unusual results.

Mike sat quietly observing the tests for the rest of the day until about 6.00pm. By then everyone seemed to be getting a little tetchy and even he had started to develop a mild headache. Mike put this down to the bright flat light and the constant hum of electronic machinery and so was glad to finally escape to the kitchen where he put the kettle on to make himself a cup of tea. A few moments later Jan and Claire joined him.

'How do you think today went?' Mike asked trying to make conversation. He knew that the computers would take some time to process even the basic results.

'Not bad,' replied Jan, 'are you making us a cup?' She purposefully looked at the kettle which had just boiled.

'Yes of course, what would you like?'

A few moments later they were seated around the table when Brendon came in through the back door. Mike noticed that his

shoes had mud on them which meant he had come via the track which the cows used to make their way to the milking parlour. An image of the heavy metal door came back to the fore and he wondered whether the power system was situated beneath the calving sheds. That might explain Pierson's annoyance when he tried to gain access.

'Brendon, would you like some tea? I've just made some.'

'No thanks. I'll get myself a coke.'

'I was just asking how the tests went today.'

'Not bad,' he replied, 'what do you think Jan?'

'Just what I said.'

By now Mike was beginning to get annoyed with all the evasions. He was supposed to be researching an article and yet everyone was pussy-footing around him as if he was an industrial spy.

'So, we are all agreed that the tests were not bad, but I don't think either my readers or CERN are going to be particularly impressed if my articles consist solely of 'Not Bad' as a summary of the work carried out by ASRI.'

'I take your point. What would you like to know?'

'Jan, are you sure you should?' Brendon asked in an alarmed tone.

'Oh for goodness sake, Mike would not be here if he did not have clearance. Besides which, we all know that Liz was instructed yesterday to give him full access to our scientific research.'

Everyone except me that is Mike thought gloomily.

'We will not have any concrete results to work on until at least tomorrow lunchtime, but the tests produced a good quantity of reactions. However, the last batch did seem to behave rather oddly.' Said Jan.

'How intriguing,' Mike replied hoping that he did not sound too inquisitive, 'what was the last batch?'

'The Noril'sk samples.'

'Really?' Mike sensed that his own suppositions were about to be proved correct. 'What was odd about them?'

'We will not know that until we have had a chance to analyse the data, but it seemed to produce more reactions than the other samples.'

'I can add another odd thing to your list,' Brendon volunteered, 'every time you collided the particles there was a slight loss of power in the accelerator.'

'By how much?' Jan asked incredulously.

'Negligible but it was there.'

'Forgive my ignorance but is that important?' Asked Mike.

'Of course it is.' Replied Brendon. 'A steady magnetic field is crucial. We have a back-up to the backup systems to ensure a constant flow of power. If it failed, then there would be nothing to prevent the particles from leaking out.'

'And what would happen then?'

'If we are lucky, a quick and painless end to our lives.'

'What do you think was the cause?'

Brendon shrugged his shoulders. 'Beats me. It was certainly nothing to do with the feeds. They were fine.'

You had better run a systems check before the morning otherwise Bob will be screaming.' Added Jan gloomily.

'Yeah, I've already started but I had to get out into the fresh air. My head is pounding.'

'You have my sympathy.'

'Do you have a headache as well?' Said Jan to Mike.

'Yes, why?'

'When did it come on?'

'About 4.00.' Mike was now extremely interested in the direction this conversation was going.

'That's when both Claire and I got one. What about you Brendon?'

'Probably a little earlier than that.'

'Did anyone experience anything else? Sensations of anxiety for instance.'

There were several nods around the table.

'That's all very odd.' Replied Jan, 'I wonder what the cause might be.'

'Could it be something to do with the accelerator?'

'No Mike. It's been in commission for some time and we have never had a problem.'

'Still, it would not hurt to run a diagnostic Brendon, after the results are in of course.' Added Jan.

Mike was staring into his cup of tea. Somewhere in the depths of his memory was a vague recollection of a newspaper article but he could not quite grasp it.

'Is it possible that there was some sort of leakage from the accelerator?'

'I suppose that's possible.' Brendon reluctantly acknowledged. 'But that would not explain why all of you should suffer. There is no connection between here and...' He suddenly stopped himself as he realised that he was straying into forbidden territory. 'Why do you ask?'

Mike looked up and smiled smugly at Brendon. He was the only non-scientist and yet he seemed to be only one to spot the connection.

'Well, firstly because as you said yourself, there was a slight power loss and that could explain any leakage.'

'Hmm,' Brendon mused, 'unlikely because the loss was too low and only in one system at a time. What about your second reason?'

'Because if it has nothing to do with a fault in the accelerator, then it must be an effect resulting from the Noril'sk test.'

'I don't get the connection.'

'It's a simple one. The problems only started after you began testing that material, which means...'

'Hang on.' Said Jan. 'I see what you're getting at. If there is some sort, I don't know, radiation for example that is able to penetrate our safety systems, then there is no way we can carry on testing until we find the cause.'

Mike was lying on top of the bed trying to read his emails,

but an overwhelming sense of tiredness was making it impossible to concentrate. His agent had sent another message demanding to know when an update on the first draft of his articles would be ready. To be fair he had been promising an initial cut for at least two weeks. There were also a number of messages from Lucy. He looked at a string of little brown envelope icons, trying to decide whether to open them or not. He was tempted by the thought of the quiet life that ignoring them would bring, but an image of her constantly checking her computer for 'read' icons made him steel his nerves and open the first one. The contents brought no surprises.

Lucy was someone he had met after separating from his wife. But before a relationship had a chance to develop, his wife became terminally ill. Lucy had been fantastic. In fact, Mike readily acknowledged that he probably could not have coped without her, but situations change. Lucy was a friend who wanted to become more, but Mike was not even remotely ready for another relationship. It was his own fault. He had done nothing to discourage her. Emotional cowardice had always been a failing.

Mike's thoughts began to drift back to the kitchen conversation. As a precaution, Brendon had carried out some basic medical tests on everyone. Heart rates and blood pressure were perfectly normal. He had even taken some blood samples, which although they would not be ready until tomorrow, were widely expected to also be normal. Eventually, they had concluded that the headaches could simply be the result of the air conditioning or the pervasive smell of hot plastic. Again, as a simple matter of routine, Jan had put in a request to Liz to have the air conditioning system checked.

Another email appeared in the long list from Lucy. He stared at it for a few moments and then got up to get undressed. As he made his way to the bathroom Mike noticed the pale patch on the wall where the portrait of Rupert Everington had been. At least he assumed that was who it was. The painting was now carefully wrapped in brown paper and was sitting at the back

of the wardrobe. He had tired of the antics of whoever it was that had been playing practical jokes and to stop them he had taken the picture down. Even without the prankster, he would probably still have removed it. There was something quite unpleasant about that face.

Mike switched on the bathroom light and turned on the tap to clean his teeth.

Suddenly the still quiet of the house was shattered by a scream. Mike dropped the toothpaste tube, frozen into immobility by the inhuman sound. Then his brain caught up with what had happened, and he ran to the door which he yanked open. From somewhere below he could hear a flurry of activity. Mike ran downstairs to see where it was coming from and caught sight of Claire disappearing through the connecting passageway that joined the domestic quarters to the working part of the house. He followed her and again she disappeared, this time in the direction of the cellars. As he arrived at the base of the stone staircase, he saw Bob and Brendon huddled around the crouching figure of Jan. She was bent low in a foetal position, her head buried deep in her hands. Claire brushed aside the two men and took her into her arms.

'Jan, what is wrong. What happened?' She said in as calm a voice as she could muster.

At the sound of a female voice, Jan seemed to recover some composure. She looked up uncertainly at Claire and Mike who were shocked at the sight of her grey, almost lifeless pallor.

'I saw her.' Jan murmured in a voice was barely audible.

'Who?' Claire replied. 'Who did you see?'

'I was not sure at first. I had just switched the lights back on as they were in night mode. I thought...' She seemed for a moment to be recalling a deeply disturbing memory and shuddered visibly. 'I thought someone had broken in, a child from the village but when I got close, I see could see who she was. Dear god Claire she looked terrified.'

'Who did you see?' Claire repeated.

'It was her, the vicar's daughter. Lizzie Striker.'

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Breakfast the next day was a strained and disquieting affair. The usual disjointed conversations between those who were fully awake in the morning and those who would not come to life for several hours, were replaced by an unspoken agreement not to discuss the previous evening's events. However, the troubled, newspaper hidden faces at the table, clearly informed Mike that everyone had found the experience equally disturbing. This had been a clash between two mutually exclusive cultures. Science, which demands proof and faith which does not. As a consequence of the evening's events, Mike had remained awake for what seemed like most of the night trying to fathom what had really happened, but it appeared to defy explanation.

However, one mystery was resolved in the form of the absence of Liz Pierson. According to Claire, she had taken herself off to ASRI's UK base in Cardiff without first informing either them or her team. The apparent motive concerned settling the question of her authority. This fact came to light when an administrative assistant at Cardiff had tried to get in touch with Liz and had been unable to raise her on her mobile. Claire had taken the call and relayed the facts about the agitated enquiry to her colleagues. As a result, the farm became rife with rumours that she might be forced to resign. Rumours which Bob did nothing to dispel.

Another matter that set the rumour mill into overdrive concerned the arrival of a letter for Brendon, or rather both his and Jan's reaction to it. The post arrived as it always did promptly at 9.00am. In the few days he had been at the farm, Mike had marvelled at the punctuality of the local rural postal

service compared to his own urban postmen who had to travel as much as one hundred and fifty metres from the sorting office to his apartment block.

Brendon had been standing by the kitchen door, putting on his boots to go out into the yard, when the letters plopped onto the floor beside him. He picked them up and began to sort through the collection, then his face turned visibly pale. Mike was not the only one to notice his reaction as he tried to surreptitiously read the contents of a formal looking brown envelope, because Jan was at his side in an instant. They then went into a conspiratorial, barely whispered conversation. But the strain of keeping their voices at a murmur level whilst clearly having an emotionally charged discussion, seemed to be too much for the pair because individual words exploded through the whispers, mainly via Brendon. After a few moments, he thrust the letter into his coat pocket and stormed out into the yard. Meanwhile, Jan turned swiftly around and walked in the other direction leaving a kitchen filled with some bemused looking people.

After breakfast, Mike found himself alone as everyone else was tied up with analysing the results of yesterday's bench testing. As a consequence, he had resigned himself to dealing with his own affairs, not least of which was getting his poor agent off the hook with CERN's mad PR woman by finally supplying the long awaited first drafts. But then he was given the perfect excuse to ignore it for a little longer. Bob invited him to a private meeting. Actually, it was more of a plea.

Unlike his fellow workers, Bob was based in the domestic part of the house in what might have once been half of the old kitchen. Amongst the book filled shelves, filing cabinets and office table, was an old stone fireplace, large enough to have housed a range at some point. Mike could also see the remains of water pipes running along an open black painted beam which supported a pitched ceiling along its length. It was studded with a number of heavily painted hooks from which game would once have hung as it matured.

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'Thank you for coming.' Bob stood up to welcome his visitor. 'I am very grateful you could spare the time.'

'That's OK. Although I would appreciate it if we could keep this short as I have critical deadlines to meet this morning.' Mike lied.

'Yes of course.' Replied Bob. He got up from behind his desk and directed Mike to a scruffy looking green armchair. 'Mike. May I call you Mike?' He began obsequiously, evidently recalling the initial stiffness of their first meeting.

Mike nodded but said nothing.

'The reason why I have asked you here is to request your help.'

'Well if I can.' Mike responded, sensing a potential advantage.

'My problem is that we have a unique opportunity to contribute some real science.'

'As opposed to the routine and invisible commercial work you do.'

'Precisely.'

'You are concerned that if I start writing ghost stories that could be undermined.'

'Good god no.' Bob replied. 'Why, are you intending to do something on our somewhat colourful history?'

Mike was very puzzled at the turn of the conversation. He was sure Bob had wanted to hush up the incident with Jan.

'As I have said before, that's not really my line. So, how can I help?'

'Before I discuss that, I want to explain why it is so important. You know about my interest in interstitial vortices.'

'As a way of seeing through time, yes you mentioned that the other day.'

'Yes indeed, but that is only part of my interest. They are also key to superconductivity. Developing a system of transmitting power through a material that offers no resistance at room temperature, could open up huge humanitarian possibilities.'

'I don't doubt it but what has that to do with why I am here?' Mike was by now completely baffled.

'Despite my bravado yesterday, Liz is still the director and could easily make things very difficult for me. This is a rare chance for us to actually achieve something of real value, particularly as we have access to an object as unique as the Noril'sk sample.'

'I understand.' Replied Mike, pleased at the chance to talk about something else in a rapidly growing list of things that were puzzling him. 'It seems to be a very contentious subject. Just what is it about that meteorite that makes it so special?'

It was now Bob's turn to look puzzled. Clearly, he believed that everyone was familiar with the almost infamous material.

'It has some very unusual properties which no one is even close to understanding. For example, during yesterday's bench testing it produced close to ninety-five per cent more reactions than other samples. It is also our best hope of producing likely indications of multi-dimensions and proving that time travelling particles actually exist. We should have more demonstrable results by the end of today but essentially what the Noril'sk does is magnify many times the results we get from testing other materials. This gives us a much greater chance of spotting unusual reactions and properties. For example, there is a lot of anecdotal evidence that certain particles appear and disappear when near light speed collisions take place. We are not talking about short lived particles, but ones whose traces seem to pass out of normal three-dimensional space. But they are very rare and hard to detect as they can masquerade as other particles. In fact, they are so elusive and tricky to pin down that unofficially they are called pucks after the character from Shakespeare's A Midsummer Night's Dream.'

'And you think these mischievous particles could be travelling through a fourth dimension and so be your second time-eye.'

'It is wild conjecture of course but an avenue worth exploring.'

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Look, I can see you are very passionate about this but I still fail to see how I can help?'

'I have just heard that Liz has been summoned to a board meeting. ASRI has been getting complaints from CERN that they are not receiving the information they need from you because we have failed to provide the help you need to complete your assignment. With the re-launch of the LHC rapidly approaching, I can see ASRI supporting Liz's desire to purely focus on the bench testing, which means we will lose a unique opportunity to study the Noril'sk.'

Now Mike understood the reason for this meeting. Bob was clearly under the impression that he had been complaining to CERN about a lack of co-operation. It was obvious that his agent had concocted this excuse as a way of explaining the delays to his first cuts.

'Look Bob, I am not the source of any complaints. But I think I know who is and I am more than happy to sort that out.'

'If you could, I would be very grateful.'

'Grateful enough to start giving me access to your day-today routine including a proper tour of this place, an unexpurgated tour.'

Bob's expression took on a conspiratorial appearance.

'I think that can be arranged.' He replied.

'In that case, I will leave you in peace.'

Mike made his way to the door but just as he was about to go through something made him stop.

'Bob, I hope this does not sound insulting but, to be honest, when we first met, you did not strike me as the ambitious type.'

Bob smiled a curiously self-satisfied smile. 'Yes, I do understand and you would have been right until recently. But things have changed. It's personal and so I would rather you did not ask.'

'No, of course not.' Mike replied.

Bob proved as good as his word. Within an hour, Mike had been given access to their computer system and his calendar began to fill with a list of meetings. In return he had finally sent off the first of the draft articles together with a firm warning to his agent, not to make any more complaints unless he authorised it.

The first on his list of meetings was to be a discussion on the results of the bench testing. Thus it was, that Mike found himself in a gathering of the entire staff, watching a detailed presentation.

A seemingly endless collection of statistical information, graphs and charts meant that it was not long before Mike switched attention to his companions. Work often draws together disparate personalities and this group was no exception. However, in the short time since his arrival, Mike had become aware that their relative isolation and close working conditions, served to accentuate the often complex relationships of a small group.

Liz had returned from Cardiff and was now happily swapping light hearted comments with Bob. Evidently, their rift had either been voluntarily or compulsorily healed. They made an odd pair. When not arguing like children, they acted almost like an old married couple. From their respective CVs, he learned that they had worked together for many years and so, he reasoned, they knew each other well enough to survive what might seem to an outsider as a volatile, if not destructive, relationship.

Mike began to focus just on Liz. In many ways, she reminded him of an elderly school headmistress from the days of his childhood; straight-laced, aloof and prickly. But the exchange in the kitchen had convinced him that there was more to her spat with Bob than simple pride.

Unlike Liz and Bob, Brendon was paying full attention to what Jan was saying and Mike wondered whether there was something other than a purely platonic connection between the two. Certainly, their conspiratorial conversations gave that

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impression. Mike had to admit that he was more than a little intrigued by these two and Brendon in particular. A casual meeting could easily result in the impression that he was a clean cut, square jawed Englishman of the Bulldog Drummond generation, but Mike was beginning to feel that there was something more complex behind the facade.

Then his attention turned to Claire. She had perched herself in such a way that her knees were tightly packed beneath her chin and as usual, was looking very attractive. She seemed to be detached from the others. In part, this could be explained by her age and junior position, but there seemed to be some other factor at work. She did not appear to be the shy type and she had been here long enough to fit comfortably within the small group. Yet there was an unspoken tension and he speculated whether there might be a triangle at work with Brendon and Jan.

Finally, there was Bob. Although he had hinted at the existence of a relationship, Mike could not understand how he found the time. Of all the ASRI team, he was the one person, to Mike's certain knowledge, had not left the farm. Nevertheless, he was clearly displaying outward signs of a middle-aged love interest such as his painful attempts to appear trendy. All in all, for a writer, this was a worthy group.

Jan was doing a reasonable job of ensuring that the raft of PowerPoint slides made sense but failed miserably in trying to make the contents sound interesting. As this was Mike's first invitation, he did his level best to stifle a desire to yawn. It was only after two and a half hours that the lights were finally switched on and the meeting thrown open to discussion. Both Liz and Bob tried to keep the dialogue focused on whether the bench tests were sufficiently robust to be passed back to CERN, but Jan, Brendon and Claire seemed more interested in Bob's own experiments and it did not take him long to yield to peer pressure.

'Jan,' began Brendon, 'if I have interpreted your results correctly there are three variants between the Noril'sk sample

and the others.'

'And what would those be?' Said Liz in an exasperated tone as the conversation threatened to stray once more.

'Firstly, the percentage of sub-atomic particles created as a result of the collisions is substantially larger than you found using other materials. Also, there are two sets of traces which cannot be explained. Can we look at slide sixty-two?'

Jan searched through her laptop slides and projected the requested image. Brendon got up and pointed to some grey lines shooting out in different directions from the point of the collision.

'This frame shows what happened during the first fraction of a second after the collision. The tracks of most of the particles coming from this central point all have standard lengths indicating that they are all travelling at a consistent speed. But if you look carefully, there are two which are different.'

Everyone got up from their seats to take that closer look.

'I see what you mean.' Said Bob. Well spotted. I wonder why the computer did not pick it up. Jan, do you have any ideas?'

Jan looked a little guilty. 'Because it was not programmed to, nothing travels faster than the speed of light.'

'What about tachyons?' Asked Mike with a wry smile.

'Can we please keep this discussion focused on the subject in hand.' Pleaded Liz. 'Mike, I am sure that would be of great interest to your readers...'

'Actually, you might be on to something.' Interrupted Brendon. 'Timberlake came up with some similar tracks last year and they conjectured that it might be due to tachyons.'

Mike was surprised to find that his off-the-cuff remark had been taken seriously.

'But as I understand it, tachyons are not part of the standard models of atomic and gravitational theory. They are nothing more than an idea created to try to explain rare particle traces that appear to travel faster than light.'

'Exactly so,' exclaimed Brendon, 'that is the key point of

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conducting experiments using the Noril'sk. It can magnify the production of exotic particles and here we have an example of one of those creations.'

'You said there were three variants.'

Yes, I did Claire.' Brendon pointed to a broken line at the top of the image. 'This track appears and disappears at regular intervals. As there is only a single line it is unlikely to be the result of decay and formation of new particles. A more likely explanation is that it is popping in and out of our dimension.'

'Now that will of interest to CERN.' Bob purposefully looked at Liz who was sitting next to him.

'I agree,' she replied in a non-committal tone, 'as you keep reminding us, one of the objectives of the LHC is to explore the existence of other dimensions. I admit this is an intriguing result. I would certainly agree to some minor re-testing to see whether we can repeat the results, provided of course that it does not interfere with our main work. Thank you, Brendon, for your contribution.'

'Glad to be of service.' Brendon replied clearly annoyed at being patronised.

'Could someone kindly explain to a humble journalist what it all actually means and what is going to happen next?'

For a moment, nothing was said as if each was waiting for someone else to respond. Then Bob took the lead.

It has long been conjectured that to unite Quantum Theory which deals sub-atomic universe and Relativity which deals with the macro universe, there has to be some unknown element. Without going into details, the two try to explain the nature of gravity in different ways which clearly cannot be the case. Gravity is essentially a weak force. For example, I can use a small magnetised bar of metal to pull a pin away from the gravity of a giant object like the Earth. According to Einstein, this should not be possible since he maintained that a larger object should have a greater effect than smaller objects. The greater the mass, the greater the effect on any object coming within its gravity field. One possible solution to explain why

gravity is weak, might be the existence of other dimensions. Gravity moves in between these different dimensions and so becomes diluted. We simply see the results of this manifestation differently at the micro and macro levels. However, their reality has yet to be proved. One source of proof would be to witness particle exchange between ours and other dimensions.

However, proving the existence of such transitions would, in theory, require us to reproduce the big bang to see how everything evolved. The accelerator tries to mimic this process but on such a small scale and at such a high cost that it would be almost accidental to actually see anything unusual happen. The Noril'sk as Brendon mentioned, magnifies these reactions and so gives us a much better chance of seeing something. All of this is crucial to marrying Albert Einstein to Max Planck, and creating the long sought after Theory of Everything.'

'You make it sound very simple, but what about the dangers. I thought that the Noril'sk had a problematic history.' Mike hoped to see a reaction from Liz, but he was to be disappointed.

'Thank you everyone. This has been a very productive session. If I could have all of your reports by tomorrow evening.' Liz concluded and then left the room leaving a panorama of bemused faces. It was Bob who broke the incredulous silence.

'I am not sure what you mean by dangers, Mike. Of course, I am aware of its reputation but then Tutankhamen's mummy was supposed to be a harbinger of death and yet over a million people visited the O2 without ill effect.'

'You can't dismiss it like that.' Added Jan. 'I know it all happened forty years ago, but it still happened.'

'We carried out a test with no problems.' Replied Bob.

'That's not quite true, is it?' Jan interrupted. Everyone in the cellar suffered head pains and anxiety attacks and that only happened after we tested the Noril'sk.'

'Exactly,' replied Brendon, 'and all the tests on the power

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and servos came out negative. Apart from the power loss, everything was working normally.'

'I am sure there is a perfectly rational explanation.' Said Bob trying to calm things down.

'Such as?' Challenged Jan.

'We have all been working under a great deal of stress for some time. Yesterday, we were working in a room without natural light or fresh air for fourteen hours straight. It's no wonder we were experiencing some odd reactions.'

Jan looked unconvinced. T'm sure there must be more to it than that. Brendon started to experience problems very shortly after we began the tests. Besides which, mild claustrophobia cannot explain the power loss.'

'Look Jan, if the Noril'sk had been giving off some sort of malignant effect, how did it manage to reach the rest us? May I remind you that the accelerator is shielded by layers of steel, lead and several metres of reinforced concrete. As I said, it is far more likely that the symptoms we experienced were due to the poor conditions of working underground.'

Possibly,' Mike replied, with a note of doubt, 'but as Jan has just mentioned, it would not explain the power losses and Brendon has been unable to find an explanation.'

'He has a point there.' Added Brendon, beginning to sound like a meeting chairman.

Bob looked tired of the conversation.

'It is possible that the Noril'sk has some kind of property that affects magnetic fields. If there was any variation, then the power supply would have self-adjusted to compensate. I think that is a far more likely explanation than a mysterious new source of radiation.'

'It is curious.' Claire observed.

'What is?' Bob's exasperation was beginning to mature into anger.

'Well, it's only since those tests started at 1.00pm yesterday, that all the weird things have been happening.'

'You mean my aberration.'

'Was it an aberration Jan?' Mike took a keener interest in the conversation now that someone had finally broached last night's strange events.'

'Not one of my making. I am not normally given to seeing things.'

'Of course not.' Mike tried to sound sympathetic. 'Look, what did actually happen. Perhaps if you talked about your experience, it could help us to understand whether there is any connection to the Noril'sk.'

Jan fell silent for a moment. Her face looked grey and troubled. It was clear that the incident did not fit comfortably with her rational view of the world. Then she seemed to come to a decision.

'OK, why not. I had been working in the control room checking through the returns to ensure we had enough to start the computer working on the overnight programme. I finished the checks on the data input and realised that it was just after midnight. I knew that it would take me about thirty minutes to complete uploading the information and so I went to the kitchen to make myself a cup of coffee. Now I come to think of it, when I left the room the first time, I had a feeling that someone else was there.'

"The first time,' questioned Mike, 'when was that?'

'About an hour or so before.'

'So, exactly what happened the first time?'

'I was just about to explain that. I wanted to go to the bathroom. I got as far as the foot of the stairs and had a strange feeling, as if I was being watched. I called out but there was no reply of course. So, I dismissed it. It's not as if anyone could have been hiding.'

'Did anything else happen before you saw it?' Mike was a little concerned about using such an emotive word as ghost, especially given Jan's obvious discomfort.

'Come to think of it, yes. Whilst I was working, I thought I heard a sound.'

'What sort of sound?' Asked Brendon.

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'A girl's voice but very soft. Not quiet, but as if it was very far away.'

'Really, what did it say?'

The atmosphere had become electric as everyone listened intently.

There were no words. Just... It is hard to describe... like a sad sigh. I went out into the corridor to look for the source but of course there was nothing there. I did not expect there to be. It was almost as though the sound was inside my head.'

'Then what happened later?'

'I got back from the kitchen and the first thing I noticed was that the lights had switched to night mode. As the bottom of the stairs is very dark, I was walking very carefully. I was about halfway down when I saw a shape. It was the vaguest impression moving on my right, but by the time I had turned to get a better look, it had gone. By this time, I have to admit, I was feeling a little panicky.'

'I am not the least bit surprised.' Mike smiled reassuringly.

I ran to the light switch, spilling my coffee as you may have noticed. Then I began to search. I could immediately see that there was nothing in the corridor and so I checked all the doors. First, down the right hand side and then the left. They were all locked. I then returned to the control room door. Now, this bit is important. I walked half the length of the corridor and during that time I could clearly see that it was empty. I then opened the door, turned a little as I was about to walk in and there she was, not more than a couple of metres away.'

Mike briefly looked at the others and noted that they were doing the same. It was almost as if everyone was unconsciously looking for mutual support as the disturbing story unfolded.

'Can you describe her? What was she like?'

'She was a little girl. There was nothing ethereal about her. She was quite solid. She had long, fair hair which was badly matted. Her face was thin, undernourished and her teeth were in a dreadful state, black and broken. She was dressed in a long calico dress with puffed sleeves and it was torn and raged in

parts. The really weird part is that I although I could see her as clearly as I can see you, it was obvious that she could not see me.'

'Why do you think that?' Mike was intrigued by Jan's statement.

'Because I said hello. I know it sounds silly, but she looked so real that it came out automatically.'

'And she did not respond?'

'No.'

'Did she do or say anything?'

'She appeared to be focusing on something beyond the staircase. It did not seem to be along the line of the corridor but at a point behind the side wall.'

'Do you think she was looking at something that you could not see?'

'She was definitely watching something because her face changed as if she had seen what she was looking for. She looked terrified. I turned to see what it was, but there was nothing and when I turned back, she had vanished. That's when the reality of it hit and I screamed.'

Mike glanced at the faces of the others as Jan finished her story. Each shared the same look of incredulity. It was not that anyone doubted Jan's account, but simply that the story was completely at odds with everything they knew about the world as practical scientists. It was Claire who broke the awkward silence.

'Your perception that the sound appeared to be inside your head, is interesting.'

A dark look from Brendon had her quickly clarifying what she had said.

'I meant that it could indicate some kind of external influence like everyone having headaches.'

'Sorry, but I don't see the connection. The image described by Jan is very close to historical descriptions of the Striker girl.'

'Exactly Brendon.' Claire replied. 'We know that Jan is not given to seeing things. And everyone here has to have regular

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medical tests. We also know that Jan is a good scientist. She is trained to observe. That would seem to leave us with two options. Either she actually did see a ghost or she suffered some kind of physiological event which could potentially have been a delayed reaction to the tests we carried out. The fact that she saw something that was closely based on what she knew already and that the voices appeared to come from inside her head; would seem to indicate that this is a physiological event rather than a psychic one.'

'All of which brings us back to the Noril'sk.' Added Brendon. 'I said that stuff was dangerous.'

'I think we are stretching our assumptions a little far.' Countered Bob defensively.

'Perhaps,' interrupted Mike, 'but has anyone thought to check camera footage?'

The looks on everyone's faces gave him an answer. One by one they made their way to the main control room and Jan sat in her usual place at the computer terminal to pull up the files. A flurry of fingers soon produced an image of the corridor from the previous night. Jan then sped the film forward until it reached the correct time frame just before 12.00am. No one said a word as they crowded around the back of Jan's chair in eager anticipation. Each saw Jan walk towards the stairs and then once out of view, heard her footsteps as she ascended the staircase. Then for several minutes, there was no movement with the exception of the continuous transposition of numbers in the bottom right hand corner, to imply that time was moving forward. Then the lights went out and the picture became grey and specked as the infrared kicked in. The first positive thing that occurred was not movement but a sound. It was muffled and distant but its meaning was clear. A door had been opened and closed and this was followed by a series of slow taps on the stone stairs. Jan was returning from her trip to the kitchen. The taps stopped for a moment and abruptly exploded in speed and volume as a grey shape raced towards the control room door and switched on the light.

'Jan, can you rewind a few seconds and freeze it?' Asked Brendon.

Jan did as she was asked and once more, they were looking at a grey speckled image.

'Is this about where you first thought you saw something?'

'Yes.' Jan replied. 'It could not have been more than a second or two before I panicked and ran to the light switch.'

'Well, there is nothing there.'

'No.' Replied Jan gloomily.

'Why don't you run it forward to where you definitely saw something.' Suggested Mike.

Jan restarted the film. They saw her walking up and down the corridor checking the doors, then returning to the control room door where she stopped. But Jan was alone.

'I don't understand it.' Jan absentmindedly scratched the side of her head. 'There should be something. I saw her so clearly.'

'There is still nothing there,' repeated Brendon, 'although that in itself is not proof either way.'

'Actually, I disagree.' Mike interrupted. I think the film does show us something. Jan, can you go to the point where you first saw Lizzy Striker clearly and then run the film forward at a quarter speed.'

Jan did as she was asked. Each once more watched as Jan looked first towards one end of the corridor, turn to face the other, before returning to her original position and then start to scream.

'The eye line.' Said Claire.

'Just so.' Replied Mike. 'Jan, can you zoom in to your face?' As the film began to roll slowly forward once more, they could clearly see Jan's eyes fix on an object about two metres away.

'Watch Jan's face and eyes carefully.' Mike pointed at the screen. 'Look at the eye line. Is it not at the level you would expect if she were looking at a small girl? The expression is also interesting. At first, it is one of surprise, but then it turns to one

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of horror, perhaps in empathy with what she saw on Lizzy Striker's face. Now, look at her eye line as she turns to see what Lizzy is looking at. It is not in line with the corridor but at something beyond the side wall just as she described. Now finally Jan turns around once more to look at the young girl. Watch her expression as she realises Lizzy has vanished. Now, we may not be able to see what Jan saw, but we can certainly tell that she witnessed something.'

'Yes, I see your point,' replied Claire, 'but it could still be that Jan simply thought she was looking at something.'

'In that case, I don't think you have understood the point.' Mike smiled reassuringly. 'Jan, go through the last part again, but this time I want you to zoom in on the eyes.'

Once more Jan ran the sequence. As they watched, it became obvious that her pupils were reacting to changes in light reflection. Jan turned around to look at Mike and mouthed a silent thank you.

As Mike reached the door of his own room, he set down the plate of sandwiches and cup of tea onto a small conveniently placed table and then opened the door and switched on the light. Picking up his meal once more he made his way to the writing desk at the far side of the room before returning to close the door, grateful that he could finally shut himself away from the rest of the house.

Having set a precedent of actually sending his agent some work this morning, Mike thought he would continue in this new frame by writing up some thoughts on the day's activities whilst they were still fresh in his mind. Although he had said on two occasions that he was not interested in writing about ghosts, he thought that it might make an interesting diversion. The Ghost of Woodville Hall. It had quite a catchy sound to it.

Having allowed himself to daydream for a few moments, Mike brought his thoughts back to focus on what he really

wanted to record. At the top of his list was the matter of the Noril'sk. Clearly, there were strong feelings about testing such a scientifically notorious substance. How had ASRI managed to obtain a sample and were there underlying reasons why a remote rural lab had been chosen to test it after a gap of well over forty years.

Mike picked up a sandwich and took a bite before switching on the laptop. His desk sat in front of a window and he could see his own reflection as the backdrop of the night sky turned the glass into a poor man's mirror. The laptop made a strange whirring sound and a blue screen stubbornly refused to resolve itself into its usual start-up mode. He gave it a warning tap.

Recollections of recent events were swirling in an uncoordinated manner through his mind. There was the curious armistice between Liz and Bob. Was it forced or voluntary? Was he the cause or were there other reasons which could mean that ASRI was keen for CERN not to become concerned about their contract. If that was the case, what had he missed?

The day had also thrown up a number of other unanswered questions. In particular, Mike was curious about how a rural facility was powering such an energy hungry device as an accelerator. There was the speed at which evidence for Bob's theories about exotic particles had been found. At their meeting this morning he had been confidently predicting the existence of inter-dimensional particles. And lo and behold, a few hours later there they were. Of course, it could simply be a case of serendipity or that the Noril'sk was in fact, a truly remarkable material ignored for over four decades. But Mike was not convinced. His journalistic experience was telling him that something was not quite right, and it was beginning to agitate his curiosity.

Then there was the matter of Brendon Prince. The landlord at the Oak had hinted that all was not well and there had been the letter which had clearly sparked a strong reaction from both Jan and Brendon. Was this a potential security risk, perhaps

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blackmail which could prove relevant to the other reason for his visit to the farm. Then there were the curious incidents that had happened after the testing commenced, the unexplained headaches and of course Jan's ghost. Did she really see something or was it, as Claire would have them believe, a simple trick of the mind. Finally, was there any real connection to the Noril'sk or was it simply coincidence, born out of legend. Clearly, Mike would have some interesting areas to explore beyond a modest report on ASRI. Somehow, he had managed to stumble across a fascinating mystery.

The distant striking of a clock brought his attention back to reality. He looked at his partially eaten sandwich and tried to make up his mind whether it was worth finishing. He settled instead for a couple of sips of his by now, lukewarm tea. The laptop slowly ground its way through its start-up procedure and was now trying to establish contact with ASRI's wireless network.

Mike recalled reading an article about a serious study of ghosts as a cultural phenomenon. According to this piece, human expectation of ghosts, like UFO sightings, evolved alongside the natural cultural cycles that occur over time. Victorian sheets morphed into spectral shapes with the advent of photography. These had then transformed into free floating spherical lights as film became digital. The article had argued that greater understanding of the world brought forth an increasingly sophisticated expectation of the unexplained. However, there was one constant at odds with Jan's account. Throughout history, ghosts are ghostlike, partial inhabitants of the physical and other worlds. Whereas what Jan saw, or said she saw, was as solid as any normal person.

Mike gave himself a mild admonishment for allowing his thoughts to wander down such an unproductive road. He was here for two reasons. One obvious and open and the other...well, that was to come. He was not here to speculate about the nature of the paranormal.

An unexpected ping from his laptop made Mike jump. It had

finally logged on and was downloading emails. There was another long list from Lucy. He stared at the little brown envelope icons and a sense of overwhelming guilt washed over him as he began to read through the series of progressively more frustrated questions and statements. He had been meaning to call her since leaving CERN and that was over ten days ago. Actually, that was untrue. He had been avoiding her. Lucy had been so kind after the death of his wife and he did care for her. That was why it was so hard to explain that he could not return her feelings.

Mike opened that last email and read through its contents. He pressed the reply button and was about to compose a response when he stopped himself. Lucy deserved more than a 'dear John letter' and so he contented himself with a reply promising a call in the morning.

Having done the deed, Mike glanced up at his reflection in the window once more. The darkened glass soothed away the lines for which he was grateful. In fact, he could almost see the curly haired, slim face of a long passed youth. As he stared absentmindedly, an image of something odd slowly made its way through his muddled thoughts. He studied it for a few seconds before his conscious thoughts recognised what it was that he was looking at. He turned around with a start, knocking over the remainder of his tea. On the wall above the fireplace, was the portrait of Rupert Everington.

Mike felt a rising sense of anger at the thought that someone in the farmhouse, evidently thought it amusing to come into his room and rehang the picture. He got up and made for the door. Despite the late hour he was going to find out who the prankster was. He had just stepped into the corridor when a thought struck him. The wardrobe where he had placed the picture should have been locked and he had the only key. At least he thought he had the only one. He reached into his trouser pocket to see whether it was still there. It was. He looked at the small, slightly rusted object sitting in the palm of his hand and decided to test it. The wardrobe was large, old

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fashioned and had a sturdy build. The lock was sufficiently robust to make it impossible to force the door open without damaging the wood, and yet it was unmarked. Mike placed the key in the lock and turned it. The door sprung gently open as it always did, and the first thing Mike saw was a brown paper package wrapped with coarse twine sitting on the floor. His heart began to race and he had a hard time catching his breath. Slowly Mike turned to look at the picture on the wall. All that was there was a rectangular patch of unfaded wallpaper.

The next morning was a late start for Mike. It had nothing to do with tiredness from the previous evening's events, even though he had had a restless night. Mike simply wanted to be sure that no one saw him. A package had arrived, and he was eager to test a theory using its contents. However, to fulfil this need, Mike had to be sure that everyone else was fully occupied and Liz in particular. He had discovered at the previous evening's dinner that she would be away all morning negotiating a deal with a chemical company. This provided the ideal opportunity to have a proper snoop around as he was sure that the others would not be taking the need for security quite so seriously.

Mike placed the package in his pocket and headed for the kitchen. The table and sink were still full of plates and bowls. He checked the rota on the fridge door and found that it was Brendon's turn for kitchen duty. The fact that he had yet to wash up probably meant he was safely tucked away in one of the labs.

Foregoing breakfast Mike wanted to make maximum use of the limited time available. He pulled on a pair of Wellington boots before making his way outside. It was quiet. The early milking had long since finished and the yard mucked out. Despite some recent rain, there remained in the air the typical sweet pungent smell distinctive to dairy farms. Mike turned left to pass the cowshed and pole barn before heading to the rear of the single storey out-buildings. As soon as he was out of sight of the house, Mike fished the package from his pocket and unwrapped it to reveal a small digital Geiger counter. He switched it on and had a sudden moment of panic as it made a

piercingly audible whining noise. Mike frantically fumbled with the device to find the volume control before standing quietly for a moment whilst it self-calibrated in order to establish a normal background reading. He then connected it to a pair of earphones and placed the counter back in his pocket. As far as anyone was concerned, he was simply out for a morning stroll whilst listening to music.

The device gave off a steady one or two clicks every few seconds as he made his way along the rear of the animal sheds towards the heavy green metal door that had fascinated him since he arrived. He was convinced that the wheel locked contraption, which looked so out of place in such an idyllic rural setting, had some connection with the power source for the accelerator. But the pitch failed to change. Mike paused for a moment, undecided on what he should do next and briefly looked around. He was standing at the edge of a long rectangular field with a single five bar gate on the far right that appeared to lead to a road which knew was called Angel Lane. As it would look suspicious if he walked up and down close to the door as he would like to have done, Mike decided to set off towards the road.

It was a lovely if cold late autumn morning, one of those days when the sky becomes a vivid dark blue. Somewhere in the distance, a tractor started but instead of intruding on the background of natural rural sounds, it seemed to complement them.

The steady stream of clicks continued as he walked around the field boundary towards the gate. When he was about halfway round, Mike stopped to get his bearings. The gate seemed to line up with the metal door and the newer part of the farm building where the labs were situated. In the middle of a field, he noticed a slight depression. It was an odd shape for a natural feature, almost circular. Mike made a mental note of its position before climbing the gate which led to the narrow lane in which he found a number of tethered goats. They eyed him suspiciously for a moment before deciding that eating

grass was more important. On the other side of the lane was another field that belonged to the next farm. Across the centre ran a clear path of compressed grass showing that the field was used as a shortcut to some small buildings in the distance. He climbed over the second gate and followed the path as it led towards the top of a hill. He had not gone very far before he noticed another depression of a similar shape and size to the first. At a rough guess, they were about three hundred metres apart. Mike made straight for it and as he approached, the clicks from his Geiger counter increased from two to five or more. These dropped off as soon as he was clear of the shape. Mike continued towards the end of the path but found that it simply provided access to some storage sheds. Nevertheless, the low hill on which he was now standing provided a good view of both depressions which were certainly not a natural formation. His next step was obvious. He would retrace his tracks back towards the original depression. As he climbed over the gate once more, Mike purposefully paused to give himself the chance to check for any further cameras. Apart from those mounted on the roof of the animal sheds, there were no others, at least no obvious ones. The depression was situated almost in the middle of the field. This time he felt safe to head straight for it as it was an obvious route back towards the farmyard. He walked slowly, looking for any unusual signs but there was nothing. When he was within a metre of the depression, the speed of the clicks again quickened, this time to about ten. The pace remained steady until he reached the other side when they dropped back to one or two. The conclusion was clear, although the levels were very low, somewhere below his feet ASRI had managed to secrete a nuclear reactor. That was the source of power for the accelerator which had been constructed below neighbouring farms. It was unlikely the local authorities had given permission and even less likely that the local population were aware of it. No wonder Liz had become so agitated when he tried to open the metal door. It probably provided access to the control room. The question for Mike

was whether he should tell anyone.

When he arrived back at the farm, Mike found Jan, Bob, Claire and Brendon carefully examining a long trail of paper in the kitchen. He filled the kettle to make himself a cup of tea before turning his attention to the close-knit group.

'What's that all about?' He enquired in as disinterested tone as he could manage.

'Energy readings from the benchmark tests.' Said Jan.

'Is that so,' Mike replied not at all sure whether he was interested or not, 'why the importance?'

'Claire thought that some sort of high frequency radiation might be the cause of all our headaches and anxiety attacks.'

'But I thought that radiation had been ruled out?'

'Conventional nuclear radiation yes, but there are other forms. This shows us all the types of electromagnetic radiation produced as a result of the collisions.'

'So, have you discovered anything?'

'Not yet, we have only just started.' Jan was beginning to sound impatient. 'Look, if you really are interested why don't you come and help.'

'Yes, of course, why not. What would you like me to do?'

Jan pointed to a section of the long trail of paper which was currently unassigned.

'You can have that part. We are looking for a mode.'

'A pardon me what?' Replied Mike looking very puzzled.

'Anything that substantially deviates from the average. You need to examine each column of figures and make a decision on what is an average reading and then look for any figures that are significantly different.'

Mike looked at his segment of paper. It was about two meters long and filled with tiny eight point numbers, so closely packed together that from any distance they looked like nothing more than a grey block of colour. However, on closer inspection, he could see that they consisted of individual columns. He began to trace through the figures trying to gauge whether there was a definite pattern but as far as he could see,

the figures were a completely random selection of plus and minus numbers. He glanced up at the others and found they were all intently focused on their work. There was nothing for it but knuckle down and study the sequences properly. He took a notepad from his jacket pocket and wrote down any high or low numbers. After ninety minutes, his eyes refused to acknowledge the small print. Mike stood up and went to the sink where he dampened a paper towel to cool them down.

'OK, I think now is a good a time for a break.' Bob took his cue from Mike. 'Has anyone found anything?'

Jan and Brendon shook their heads. Bob then looked at Mike.

'Nothing from me.'

'I think I may have something.' Said Claire in a sheepish voice.

'Are you sure?'

'Yes Jan.' Replied Claire in a tone that indicated her displeasure at being questioned.

'Sorry. I meant to say that I was puzzled at why that section of the spectrum could have an effect.'

'Really, why is that?' Mike questioned.

'Because it involves very low energy waves of the kind that you might find produced by a biological source. So what did you find Claire?'

'A very large spike at the beta wave level, which was only present when we were testing the Noril'sk.'

'From the accelerator?' Bob asked.

'No, from our own brain readings.'

Everyone stood up and gathered around Claire to have a look at her data even though it was impossible to discern anything merely from a casual inspection.

'I looked at the timings of the spikes and there is a definite correlation between the timing of the collisions, when Brendon first noted the effect and when it reached us. The timings are exact multiples of the frequency and the distance.'

Mike smiled to himself. Despite all their efforts to conceal

the position of the accelerator and its power source from him, they had now provided the information on a plate. All he had to do was the maths and it would give him its exact position and he felt sure that it would encircle both depressions which would give a run of 2.7km or one tenth the size of the one at CERN. Not that the information was of any use. It just made him feel comfortably smug.

'So, what does that tell us? We still have nothing to explain the source.' Brendon observed.

'That's true,' replied Bob, 'but we now have timings and so we know which part of the readings to examine. Jan, can you write a programme?'

Jan nodded.

"The thing that puzzles me,' Bob continued, 'is why a beta spike should cause headaches.'

Probably because it would be in conflict with the brain's natural function. Beta waves are associated with active or anxious thinking. If you have too much activity, then you can often experience a headache in the same way that a migraine forms.' Said Mike, pleased at the thought that he could contribute something useful to the discussion. 'As a matter of interest, why were you measuring brain waves.'

'Simple precaution,' answered Brendon, 'we are dealing with a substance that has some strange properties. Apart from the obvious health reasons, we do not want our judgement affected by some unknown factor and start claiming we have seen little green men.'

Mike had not thought of that and his feeling of smugness came to an abrupt end.

'Brendon. Can you tell us a bit about beta waves?' Asked Bob.

Yes of course, although Mike seems to have nailed it pretty well. Setting aside gamma and mu waves, betas are the highest frequency of the four types of brain wave. They are the patterns you would expect to see when the brain is thinking about something. Next comes alpha waves which show that someone

is relaxing. Then theta waves that indicate deeper relaxed states and finally delta waves which are associated with deep sleep. Interestingly there have been experiments to show that the four types of wave can be artificially stimulated by certain sound frequencies for example.'

'We know that the accelerator produces vibrations. Is it possible that some might be at ultra-low levels?'

Brendon shrugged his shoulders. 'I really don't know Bob. Ultra-low frequency sound does travel long distances through dense material. That is why certain animals such as whales and elephants use them to communicate. I read once that certain areas of the London Underground are affected by low frequencies and these can make people uneasy.'

'Good.' Replied Bob. 'That gives us something positive to work on. I still do not believe that the Noril'sk presents any danger but we need proof. If you are all willing, I would like to conduct an experiment to confirm the matter one way or the other. If we repeat the bench test and have each of us at set distances from the accelerator, we can then monitor for any type of vibration or electromagnetic signal reaching us. That will confirm whether a physical factor is the cause. If it is, then we can work out how to inhibit it. Is everyone OK with that?'

Bob, I am not convinced.' Jan looked thoughtful. 'I agree that we need to be sure that the Noril'sk is safe to test but I don't believe that it has anything to do with what I saw.'

Perhaps not, but none of us can be sure of anything until we have either ruled out any external influence affecting our brains or we have identified it and constructed an inhibitor.

As this seemed to conclude the discussion, everyone got up from their chairs and began to go their separate ways. However, Mike had been intrigued by the fact that a level-headed scientist seemed to believe in ghosts, and he wanted to have a quiet word with Jan to find out why. Fortunately, she did not seem to be in a hurry to leave which saved him the embarrassment of concocting an excuse to talk to her. As soon as everyone else had gone he seized his chance.

'Jan, do you really believe that what you saw was...' he hesitated for a moment, 'well, a ghost?'

Jan smiled warmly. 'Thank you for saying that, rather than do I believe I saw something and yes, for want of a better word, I do think I saw a ghost.'

I have to confess that I find that quite surprising.' Replied Mike trying to use words to soften his intended meaning.

'You do.' Jan looked puzzled. 'Why is that?'

'Because of everyone here, you are the most clinical. Sorry, that was a little cold. I mean that you have a reputation for valuing demonstrable facts and logic over conjecture.'

I suppose I do. That's what comes of being brought up by...'

Mike slapped his own forehead in exasperation as a blatantly obvious fact made itself known.

'Of course. How could I have been so dim as to have missed it. Your father was the Nobel winner Peter Carraway.'

Jan smiled in a slightly embarrassed way. 'He was but being the daughter of a famous scientist does not mitigate against having an imagination.'

'No, of course not, but I would still like to know why?'

'Do you recall that Brendon and I did some research into the history of this house? Well, we came up with some inconvenient facts.'

'Such as?' Mike questioned although he was not sure what this had to do with believing with ghosts.

'The earliest record we could find of Rupert Everington, apart from his birth in 1609, was the transfer of the deed to this house and lands in 1627. The local magistrate referred to him as a man of good character who was seeking to enter the church at nearby Warminster.'

'Does not sound much like our Rupert, does it?' Interrupted Mike.

'No, it doesn't. The house was then a small medieval building and Rupert found a master builder to draw up plans for a new house using the existing foundations. I found a letter

of payment for amongst other things, two barrels of gunpowder.'

'Gunpowder?' Questioned Mike.

'I assume they needed to remove something buried deep, perhaps tree roots. Whilst there are no records of how or why it was used, there is a local record of the fact that it was used. Several tenants complained to the priest about a series of explosions that had put their hens off laying. Within a matter of a few weeks after that our Rupert seems to start turning bad. There are two letters from the reverend Striker to his bishop in which he asks for advice on how to manage local hostility to the Manor. i.e. Rupert.'

'Do the letters say anything about what Rupert did to provoke such a reaction?'

'Yes indeed. He expelled commoners from his land and had their homes levelled. He also stopped attending services and formed an unwanted friendship with Striker's daughter Lizzie. That seems to have been the priest's main source of concern. The later letter also refers to a number of young women disappearing from the nearby villages of Todber, Fifehead and West Stour.'

'That certainly sounds like our man. What else did you manage to find out?'

'He was committed to trial in Dorchester in April 1642 and sentenced to death. But there is no record of his execution.'

'It was a long time ago. Records can get lost.'

'I agree but what was interesting is that the disappearances did not stop until December of that year. The Warminster records include a final letter from the Reverend Striker to the bishop dated the 12th of December in which he says that he was convinced that his parishioners had now found peace and that the womenfolk of the area should finally be able to live in safety. It later refers to the death of a servant called Mary West from Gillingham. I found a grave close to the plot where the Canterbury family are interred. That was who she worked for. The date on the grave was 6 December 1642.

The house then appears to have lain empty until the Trenchards moved in 1644. I found a record of an exorcism, which took place the following year. It said that although the house had a troubled history it had been at peace until the summer of 1645 when the young daughter began to be afflicted by a troubled spirit of a child of about eight or nine years.'

That would have been after the Civil War skirmish. As I conjectured, these hauntings seem to be attached to physical disturbances of the structure of the house. Apart from this time, of course. I wonder why? Did the exorcism work?' Mike asked.

'It seems to. There are no further references until 1941.'

'Jan, this is all very interesting, but it does not tell me why you think that what you saw was a ghost rather than a hallucination.'

'It's hard to explain.' Jan paused for a moment whilst she struggled to find the right words. It all seemed too real for a hallucination. That look of terror she had on her face. It was as if I could feel her fear.' Jan stopped as she became aware of Mike's expression of incredulity. 'Look, if you want a rational explanation, I will give you one. Ghosts have been a part and parcel of human existence since the beginning of recorded history and yet we have no idea about whether they really exist and if they do, what is their nature. If I am right and we have a genuine example, then this is an ideal opportunity to study it. We have equipment here that could pick up the heartbeat of a flea on the moon or measure the energy output of a single neutrino.'

But it's not the scientist that is making the decision here, is it?'

Jan looked closely at Mike and smiled. 'No, but that aspect is not entirely divorced from my thinking. There is one thing that I did not mention to others. Any hallucination, just like a dream has to be based on real experiences. It cannot predict something completely new. Do you agree?'

Mike nodded.

'When I saw Lizzy standing by the control room door, I noticed a long white scar on her left arm. I telephoned Reverend Morton this morning to ask whether he would mind checking through Striker's letters. In one of them, he refers to the identification of his daughter's body which had been badly mutilated. He wrote that identification was only possible by means of a scar on her left arm.'

'That's interesting but you mentioned that you had already researched the parish records. I assume you could have read it and then forgotten what seemed to be an unimportant detail.

'No Mike, that will not work. You see the letters were written in Latin, and I cannot read Latin. I had to rely on the existing translations. There is no mention of a scar in them.'

Mike did not see anyone until 3.00pm when they all gathered in the control room for a briefing. Bob had brought in a wipe board on which he had marked out a rough map of the farm.

'Can I have everyone's attention?' He began. This afternoon we are going to conduct an experiment to try to find out whether the Noril'sk is generating something that can stimulate the brain to increase production of beta waves. Jan is compiling a new programme that will compare and look for anything we find today, with the original set of results. If we do find something then we can start to look at how we can prevent it and if we do not find anything, then we will know for sure that it is safe to continue our test programme.

To confirm the existence of this mysterious activity, each of us will be placed at various distances from the accelerator. If it is a form of electromagnetic energy, then sensors linked to our bodies will pick it up sequentially. Claire will act as our control by sitting in the hopper.'

Mike raised his hand to ask a question. It seemed the appropriate thing to do as this had all the appearances of a lecture.

'May I ask, what is a hopper?'

'That is.' Bob pointed to a curtain at the side of the room. Behind that curtain is a small area which is screened electronically. It is a completely neutral area where no external forces can penetrate except gravity.'

'But why do you call it a hopper?' Mike persisted.

Because you cannot walk into it. The energy field needed to dampen any external influences would pass through your body like an electric current. So, you have to hop into it. Actually, it's more of a jump, but it sounded silly to call it a jumper. Now, where was I? Oh yes, Brendon will be in charge of the accelerator as usual. Mike has kindly volunteered to occupy the middle cellar. Jan will be in the control room and I will occupy an empty oil storage tank at the far side of the farm. We will each be fitted with sensor equipment but because of the risk contamination, we cannot have either mobiles, radios or battery powered watches with us. Timing will be crucial. I have printed off schedules for each of us and I will also give you all a mechanical watch and stopwatch. Can you please leave any electrical equipment behind.'

Everyone stood up and collected a sheet of paper, a watch, a baseball cap with wires hanging from it that plugged into a small box and something that looked like a large fob watch but with just one hand. Mike made his way towards the door that led to the storage cellars. Whilst most of the underground space had been converted to offices and labs, some were still used for storage and these areas retained much of their original appearance. The first storage room he entered was crammed full of long lines of metal shelving piled high with uniform brown boxes. Mike made his way along one of the narrow gangways between the shelves to the far side of the room and an old and solidly built oak door. This led to the middle cellar, which was the only part of the original medieval house that Rupert Everington had bought in 1627 to have remained untouched.

After the modern sterility of the rest of the house, the

neglected grimy stone walls, patched up in a variety of styles over the centuries, gave the room a strange and eerie feel that seemed to exude an unhappy past. The cellar was also damp and musty which was perhaps the reason why it remained unused even though space was at a premium. Bob had thoughtfully provided a chair and Mike sat down. He looked at the sheet of paper. The first test would be a control. This would consist of four thirty minute sessions only two of which would include a particle collision. At 5.00pm the detailed study would start. This would also consist of four half hour sessions. However, this time the sensor cap would measure any external influences.

There was nothing to do but settle down and wait. To occupy his time Mike began to study the architecture of the room. Although it was around the same size as the main storage cellar, the low ceiling and heavy stonework gave it a cramped, almost claustrophobic feel. A string of dim, low energy bulbs slung along the length of the room did little to brighten its appearance. The walls were constructed from large rectangular dark grey stone blocks as was the floor. They had evidently been cut by hand because there were tell-tale signs of uneven gouge marks made by hand tools. Several parts of the wall had been reconstructed from other materials that seemed to suggest long gone doorways and bisecting walls. Along the central width of the room, Mike could see a smoothly warn indentation in the floor that crossed from one side to the other. He stood up to examine part of the wall closest to the indentation for any sign of a blocked up doorway. It took him a few minutes to find because whoever had filled in the wall, had done an excellent job, but there were definite traces. Mike wondered where it had led and why so much trouble had been taken to hide it given the makeshift nature of the other alterations. It had evidently been an important passageway because it would have taken many years to create such an indentation in the hard stone. He tapped the walls experimentally to find out whether there was a secret entrance,

but they were all solid. Clearly, his original estimates of the age of the house had been wrong. This part of the house was far older than the 17th century. Mike looked at his watch. He thought he had been here for ages but in reality, only ten minutes had passed. It was going to be a long, long session.

As he continued to closely study the walls, Mike noticed holes set at about two thirds of the way up the wall and two other sets at about the half-way point and just above floor level. The top set consisted of four holes two above and two below. He wondered whether these were remains of fixings to hold torches. However, the other set of holes was more puzzling. They were both larger and deeper. Quite why he did it, Mike was not sure, but he spread himself out flat against the wall. The holes roughly coincided with his neck, wrists, waist and ankles. This had been a prison cell. No wonder it had such an unpleasant feel about it. Mike shivered and tried to steer his thoughts towards a more agreeable subject. Claire popped into his mind as she often did. He had been quite pleased to discover that she was twenty-six. Not that that made a substantial difference to the gaps in their ages. But it did make him feel less guilty about any carnal thoughts. From their occasional chats, Mike was convinced that she had a boyfriend, but she never mentioned him directly, just as Bob studiously avoided talking about his love life. Of course, he could have been referring to a man rather than a woman, but somehow Mike did not think so. His mind made a sudden jump to try to connect the two. It was such a ridiculous idea that an audible laugh burst from his mouth. The sudden explosion of unexpected sound made him jump.

'How can you make yourself jump? Come on Mike, get a grip. You will be talking to yourself next.' He said unconsciously out loud to himself.

Mike returned to his chair and waited. The room was very quiet. It was the kind of quiet that you think you can hear. The kind that wraps itself around and isolates you from the outside world. Except that he could hear something. He had to really

concentrate but there was the barest perception of a regular and slow tapping noise. From his original wander around the farm, he knew that there was a disused well fed by an underground stream. He wondered whether he could hear the water dripping into the well which had been buried for many years. Mike looked at his watch. Forty minutes had passed, and so far, he had felt nothing.

Mike closed his eyes and listened to the sound of the water. An image of a letter he had received that morning intruded into his thoughts. It had been a reminder of one of the reasons for choosing to visit the farm and also a reminder that he had an unpleasant task ahead. ASRI had received an anonymous tip-off that one of its facilities was leaking sensitive commercial information. They had carried out a thorough investigation and concluded that if there was a leak, it had to be from the farm. There was no firm evidence but ASRI had lost a number of important contracts because its competitors seemed to have inside information. If this was true and that was a big if, then Mike had a firm candidate in mind. He had not acted on his suspicions because he only had assumptions to work on and he certainly was not going to jeopardise someone's career on the basis of mere conjecture. Besides which, he rather liked the person concerned. ASRI would just have to wait.

'Jesus!'

Mike felt a sudden spasm of pain deep inside his head. It was worse than any migraine but lasted for no more than a few seconds. As soon as he could, he grabbed for the stopwatch to activate it. He also noted the time. It was fifteen minutes into the second session. As far as he was concerned this was definitive proof that the Noril'sk was producing something which affected the body. The pain had only lasted a moment but it left an unpleasant after effect of undefined angst. What had been a dingy storage room, seemed to fill with menace and shadows. Mike began to violently turn his head trying desperately to catch an elusive movement within the long shadows cast by the dim lighting. It always seemed to be active

at the very edge of his peripheral vision.

'Come on Mike old chap. Get a grip.' He admonished himself once more.

The sound of his own voice seemed to have a calming effect. Mike noted down the time. The whole unpleasant experience had barely lasted twenty seconds. Nevertheless, the feelings of anxiety seemed to cling on, resolutely demanding his attention.

As Mike sat alone with his thoughts, he became slowly aware of something new. Something that he certainly had not noticed before. An almost imperceptible scent of... rotting fruit. Mike knew that his sense of smell was not good, but he felt sure it had not been present when he first entered the cellar.

To give himself something else to think about, Mike began to study the blocked doorway once more. He rummaged around in a bag of odds and ends he had brought with him to while away the hours and found a small pocket knife for sharpening pencils. He used this to trace an outline or the original door frame in the grime covered stone. He then repeated this on the other side of the room. From his recollection of the layout of the house, the blocked doorway on the right would have led to another cellar which had been used to store solid fuel until the oil system had been installed. But as far as he could remember, there was no room on the left. He started to trace an outline plan of the house on the wall to check his thoughts, but by the time he was halfway through, he knew that he was right. Of course, it was entirely possible that there was no room on the other side of the wall. The original house had almost been completely demolished. Mike went back to his chair and took a book from his bag and began to read.

The next hour passed uneventfully until the watch sounded an alarm. He looked at it quizzically as he realised that there had been no further symptoms. No head pains or panic attacks and yet there should have been another test of the Noril'sk. Nevertheless, Mike put on his baseball cap, thankful that there was no one else around to see him. He checked the wires

leading from it to a small box, which he placed into his shirt pocket. There were two hours to go and the lack of stimulus was beginning to affect his ability to keep alert. He was not actually falling asleep, but he began to experience periods when his mind simply went blank.

'I spy with my little eye, something beginning with S.' 'Stone.'

'Yes.'

'I spy with my little eye something beginning with M.' 'More stone.'

A sensation of pain interrupted Mike's one-man game but it was far less severe than the first time and there was no sensation of fear. He noted down the time and then began to wait once more.

The book was not at all interesting and his thoughts drifted to Brendon's remark about an article on the London Underground. He vaguely recalled that it been written sometime before the turn of the century. It had concerned a study into infrasound and its effect on the human body. As far as he could remember, they had examined certain parts of the network that were reputed to be haunted and discovered a number of sound hot-spots. Areas which were subjected to very low frequencies generated by the trains and other machines. People working in these areas such as engineers, often experienced feelings of anxiety or perceptions that something was watching them. Could the explanation be as simple as that?

The remaining time passed swiftly and just after 8.00pm Mike found himself once more in the control room. He had been looking forward to hearing what the others had experienced. In fact, he was simply interested in hearing another human voice. But Bob had other ideas and asked each of them to swap locations. Instead of sitting at a table in the company of others, Mike found himself sitting alone in the hopper for an hour. It was a strange and unsettling experience. His entry into the thing had begun exactly as Bob had

described. He had to hop, although a more apt description would be jump, into a small dark room which was quite empty. As he did so, his skin tingled as if it had been subjected to millions of tiny electric shocks. Every sensation was then stripped away. Light, heat, cold and even though it could not actually counter gravity, he felt as though he were floating through endless space. Mike had found being alone in the cellar difficult enough to cope with, but the hopper seemed to take his isolation to a new level. At the end of the session, he made straight for his room. He had no intention of offering Bob the opportunity of extending the tests for another hour.

The landing that led to his room was long and narrow and adjoined the six bedrooms, three bathrooms and Liz's suite. One of the bedrooms belonged to Brendon who he knew would be powering down the accelerator. The door was open and he could clearly see a pile of papers sitting on the bed. He looked shiftily along the landing to ensure that he was alone, then moved quietly inside and closed the door. Mike had been looking for an opportunity like this for some time, but it was very unlike Brendon to be so careless in leaving the door to his room open. Mike made straight for the bed to examine the papers. He made a careful mental note of the shape that the papers made and then looked at the top one. It was a letter from a solicitor working for a well-known bookmaker. Penetrating the cautiously worded legalise, the letter was little more than a demand for immediate settlement of a considerable debt and a threat of the consequences if he failed to comply. Mike lifted the papers one at a time, noting the position of each before reading them. He then restored the pile to its original position, but not before taking pictures of several items using his mobile phone. He was just about to leave when his nostrils caught the merest hint of something sweet. Whilst the scent was vaguely reminiscent, Mike could not quite grasp what it was. He then left the room ensuring that the door was closed.

Back in the safety of his own room, Mike breathed a sigh of

relief. He did not feel any sense of shame about what he had done. His loyalties lay with ASRI, not its employees, but he was rather saddened that his suspicions had been borne out. However, the consequences, if there were any, would be a decision for Cardiff. Mike was about to make a telephone call when an idea occurred concerning a potential owner of the scent. The call would have to wait until he could be sure.

When Mike entered the dining room, he deliberately took the long way around the table to ensure that he passed by everyone. As he did so he gingerly took a discreet sniff and by the time he had reached a vacant chair he knew who the perfume belonged to and it was not Brendon.

Bob's original desire had been for dinner to be concluded before they started to review the results of tests, but no one was in the mood for any further delays.

'Come on Bob.' Said Jan, 'I for one can't face any food until I know what happened.'

Bob smiled smugly and looked as if he was going to stick to his guns but then relented.

I have been through all your notes and we have an interesting set of results. Everyone apart from Claire, experienced something during the first test of the Noril'sk. Mike and Jan had the strongest reactions. The first set of timings told us very little because everyone reacted at different speeds. But the electroencephalogram results make for interesting reading.

Overall, there certainly seems to be something radiating from the accelerator chamber that is having an effect on the body, but that effect is not quantifiable from these results.'

The room exploded in a cacophony of protests and demands for more information.

'Bob, you cannot leave it at that. We want to know exactly what happened to each of us.' Protested Claire.

'Yes, yes, give me a moment. That is what I was going to do. I just did not want you to expect anything specific. Brendon. Could you kindly tell us what you did?'

'All right.' Brendon looked nonplussed. He had clearly not expected to have to explain himself. 'For the first thirty minute session, I ran a sample of LMX32. It produced the most reactions after the Noril'sk. The test ran perfectly normally and produced the same results as before, well within acceptable parameters.'

'Did anyone experience anything during the first test?' Asked Bob.

The question was answered by a wave of noes from around the table.

'The next session used a sample of the Noril'sk at fifty per cent increased weight to the original bench test.' Brendon then stopped, waiting for Bob to pick up the discussion.

'Did anyone experience anything?'

This time everyone except Claire answered yes. Bob noted something down before returning his attention back to the group.

'Brendon, you first.'

'I started to feel anxious about thirty seconds after the test sample was struck. But it was so faint that I barely registered it.'

'Jan, you were the next closest.'

I experienced some pain and a strong and extended sensation of anxiety.'

'Mike, what about you?'

'I had quite a strong sense of pain. A sharp stabbing pain but it was only brief. I also experienced a strong panic attack. Again, it was short, only about twenty seconds or so, but it was quite pronounced.'

'And finally, as the one furthest from the source. I felt no pain but experienced a mild sensation of panic. Brendon! Can we move on to the next test?'

'Yes. I tested the Noril'sk at the same strength in the third.'

'I can tell you that no one experienced any reactions.' Bob concluded.

'So, then we started the detailed analysis. When did you use the Noril'sk sample Brendon?'

'Second and fourth. In the second I used the same sample size but we were getting only slight readings and so for the fourth, I increased the size by twenty-five per cent.'

'And everyone again experienced something although the reactions were far less pronounced than the first time. What is interesting are the timings. These prove that whatever it was that was coming from the Noril'sk, was travelling at a consistent speed.'

'But the readings do not tell us what that something was?' Jan observed.

'No, but what they do tell us is that the unidentified something stimulated the production of beta waves in all of us to varying degrees, apart from Claire that is.'

'Who had the strongest reaction?' Asked Brendon.

'Individually, Jan was the most sensitive, followed by Mike, myself, Brendon and lastly Claire.'

'That's interesting,' said Liz, contributing to the conversation for the first time, 'I wonder why? You say that Claire was the least reactive. Did she show any signs?'

'No, the hopper screened out all reactions for both Claire and Mike and that shows that whatever the stimulus, it has to be some form of electromagnetism. However, Claire was then based in the oil silo and her encephalogram still read zero.'

'When Brendon asked who had the strongest reactions, you answered individually Jan,' questioned Liz, 'did you mean that there was another criterion?'

'I did. One area produced markedly stronger results than other areas, irrespective of distance.'

'The middle cellar.' Jan answered almost with a shiver.

'Precisely.'

'Any ideas on the cause?' Enquired Jan.

'None at all.'

'Jan, you and Brendon did some research on this place. Did you come across any plans?'

'No, Mike, nothing like that. There are some drawings relating to some building work done to rectify bomb damage but that is all. Why?'

Because when I was down there, I noticed that there are two blocked off doorways.'

'Yes, I noticed that.'

'Did you also notice that it had been used as a prison?'

'I did.' Jan replied gloomily.

'Is any of this relevant?' Brendon asked, sounding a little impatient.

'Well yes, it could be.' Liz replied. 'Have you not noticed that there is a pattern? The weakest reactions were in the accelerator room and the silo. Both of those are recent structures. Whilst the stronger reactions were in the control room and cellar and both are sited in older parts of the farm. Therefore, an individual's reaction seems to depend on both their particular sensitivity and location.'

'The other interesting thing is that after the initial hit, we all seemed to become desensitised. Brendon had to increase the amounts used in the last test to produce any reaction.' Said Bob.

'That's not all,' replied Brendon, 'each time I tested the Noril'sk the accelerator suffered a slight but increasing power loss.'

'But presumably, the containment field remained intact.'

'It did but I am not sure of the cause.'

'So, where does that leave us?' Asked Mike in an exasperated tone.

'It leaves us with a potentially important piece of research, two in fact. The first concerns answering some of the questions about why the Noril'sk has such a sinister reputation. If it can stimulate the production of beta waves, that could explain why a number of people have experienced mental breakdowns when they were experimenting with it. A paper would be quite

a feather in ASRI's cap even if it not necessarily a money spinner.'

'I agree,' replied Liz, 'but the second project is of far greater interest.'

'Finding a way to stimulate, possibly even control brain waves remotely could have a huge potential for the health industry.'

'And to the political industry.'

'What do you mean Mike?' Bob looked puzzled.

'I should think most governments irrespective of whether they are oppressive dictatorships or benign democracies, would be unable to resist the ability to control peoples' minds, even if only as a crowd dispersal tool.'

'Hang it. I had not thought of that.' Responded Brendon with a noticeable tone of alarm.

'Then I suggest we should all think very carefully about it before we go down that path.'

'Mike, I have to say, I think you are being a little alarmist. At the moment, we have not even got to a hypothesis stage.' Said Liz in a tone that betrayed her annoyance. 'Can we first try to understand what it is we are dealing with before we start speculating about potential applications?'

Mike looked at her cold expression and realised that any form of disagreement would simply antagonise and for the moment he still required her tolerance.

'In that case, it is agreed. After we have completed tomorrow's bench tests, we will start on a new programme to confirm the ability of the Noril'sk to stimulate beta waves and to find out what could be causing them. Brendon, can you do some research into any papers on the stimulation of beta waves?'

'Yes, of course.'

'Jan, I think we need a programme that can screen out all known forms of electromagnetic force. That way we...'

Bob broke off as he realised that Jan was taking no notice of him.

'Jan.'

There was no reaction.

'Jan!' He tried in a louder tone.

'Jan, are you OK?' Claire got up from her seat and put a comforting arm sound Jan's shoulders. 'Jan, can you hear me?' 'Can't you see it?' Said Jan quietly.

'See what?' Claire looked up vaguely in the direction in which Jan was staring.

'There.' Jan pointed towards the opposite wall where Liz and Bob were sitting.

'See what? I can't see anything.'

'Can't you?' Mike replied.

Claire realised that they were all staring in the same direction.

'Now you are scaring me. What is it I am supposed to be looking at?'

'Count the shadows. There are two people sitting at the end of the table.'

'Yes, what of it.'

'Well,' Mike replied, 'there are three shadows.'

Chapter six

Mike knocked on the door to Liz's office and opened it when he heard a muffled response. As befitting her position, she occupied the largest and best positioned of the office spaces. It was modern, functional, furnished to impress clients and had a clear view over a well-maintained garden.

So far, Mike reflected, their relationship had been one of mutual tolerance at best and he had been studiously avoiding confrontation. However, he had now reached a point in his investigations both for ASRI and CERN, where he had to risk the relationship potentially degenerating to one of open hostility.

Mike began. 'Do you have a moment?'

Liz looked up from her laptop and was barely able to disguise a look of annoyance. 'Actually, it is not very convenient.'

'I am sorry but this is important. It should not take more than ten minutes.'

'Very well, what can I do for you?' She replied in a tone of exasperation.

Liz indicated for him to sit on a large black leather sofa and a moment later she sat opposite, behind an expensive looking smoked glass coffee table.

'The question is what we can do for each other.'

Liz frowned but said nothing.

'When I arrived, you made it quite clear that you regarded my presence as a nuisance that could interfere with your tight schedules. However, I do not think that was the real reason.'

Mike paused to see whether she would take the bait. She did not.

'I think that despite the fact that ASRI had decided not to inform anyone about the other reason for my visit, you somehow found out. What I am not sure of, is why that should cause you such concern?'

Liz sat quietly for a few moments and then seemed to come to a decision. 'You are talking about the information leak.'

Mike nodded.

'I am aware that this establishment is considered the most likely source and I have done my best to tighten security, but we are dealing with scientists, not automatons and I strongly object to my staff being lied to. I also object to my authority being undermined by an outsider. If the board has a problem with the way I run things, then they should tell me to my face.'

Mike was taken by surprise by this last remark. 'Who has been lying to them?'

'You have.'

'Me!' Mike exclaimed.

'Yes of course. Please do not insult my intelligence by denying it. You claim to be here to write a series of articles, but your real purpose was to spy on my team.'

Mike faltered for a moment as to how he was going to handle this unexpected direction. If suppose I can understand your anger to a degree but you are at least half wrong. I am most emphatically here to write about your work. Whilst it is true that I have been asked to keep my eyes open, that is because your work is very much respected. There are concerns that a formal investigation could undermine your career. ASRI wanted to be sure that this establishment was the source of the problem before making anything official.'

'I see,' Liz replied sounding far less sure of herself, 'and have you found anything?'

'I have and I think you also suspect the same person.'

'You are talking about Brendon of course.'

'You are clearly aware that he has a gambling problem. I therefore, do not understand why you have not taken steps.'

'Dr Prince is one of my employees. As director, I am

responsible for everything that happens. The fact that he is suspected of passing secrets is of great concern, but so is the reputation of this facility.'

'Is that why you have not passed on your concerns to Cardiff?'

'Dr Prince is also a valued member of staff.'

'You are concerned for his welfare?' Mike asked in a rather too overtly incredulous tone.

'You find that surprising?'

'No,' Mike blustered, 'it's just that you do not strike me as the type to take a personal interest in your staff.'

'I do have feelings,' Liz replied huffily, 'and a strong sense of duty. If Brendon is guilty then I will certainly actively pursue the matter. However, at the moment there is no evidence. Just hearsay and unproven accusations.'

'And that is why you searched his room yesterday?'

Liz raised her eyes in genuine surprise. 'How did you know?'

Mike smiled sympathetically. I am afraid that you are not very experienced. You left the door open, which Brendon never does. And you also left behind your quite distinctive scent.'

'Oh dear!' She looked crestfallen.

'Don't worry, when I realised what had happened, I closed the door before Brendon returned to his room. By that time any remaining traces would have dispersed.'

For a moment, Liz remained silent. She appeared to study Mike's face as if searching for a clue as to his real intentions. Then her expression softened and she visibly relaxed.

'You said earlier that we could help each other.' The remark was accompanied by a distinct note of uncertainty.

'I did. You will have seen that Brendon is heavily in debt to a type of people that are probably not afraid to use unpleasant methods to get their money. However, it does not prove that Brendon is the guilty party. I have so far delayed making any kind of report, but I cannot wait for much longer. What I need to know from you is whether you have found any proof.'

In a word, no. There is no solid evidence that commercial spying is taking place. It could all be down to simple research.'

'How do you mean?' Mike was intrigued by Liz's doubts. All the briefing from ASRI had been clearly focused on a deliberate act of espionage.

'The successful tendering for a contract is not based purely on costs and profit margins, it also depends on having a good understanding of your client, what they need, what they know and most importantly what your competitor's position is likely to be. A few phone calls and I can find out whether a competitor has a good cash flow or needs to raise its margins. A lot of that kind of information is freely available. For example, if they have been recently taking on staff, then that is likely to mean they have a lot of work and are therefore likely to even out profits over a number of projects, particularly with new clients. However, if they have let people go and not replaced them, then they may well need higher returns.'

'Are you saying that it could be simply down to ASRI's competitors being clever?'

'It is possible if unlikely. Companies have gone to the wall before simply due to bad luck.'

'There is one way to find out whether Brendon is the culprit.' 'I will not lay traps for my staff.'

'Liz, to be blunt, you do not have a choice. ASRI is expecting my report and the only suspect I have is Brendon. Much as I like him, I do not have much choice in the matter. None at all in fact, unless I can reassure them that you and I are cooperating to identify the source...'

At that moment, their conversation was interrupted by a loud commotion that seemed to be coming from below. They heard what sounded like strange raised voices followed by a sound of glass breaking. Liz and Mike looked quizzically at each other before Mike got up to investigate. The thought that there could be a life threatening situation had not occurred to him and a few moments later he found himself blundering into a kitchen full of strangers. He pulled up sharply as he realised

the true gravity of what is going on.

'Jesus Christ, how many more of you?' Asked one of four large burly men dressed in almost identical black suits.

No one said a word.

'The question was not rhetorical.' A fifth, smaller man emphasised his point by waving a small dull grey hand gun.

'Just Dr Pierson,' said Liz as she entered the room, 'and what are you gentlemen doing here?'

'I like that. Let us keep this nice and civilised.' Observed the fifth man. 'I apologise for the intrusion, but we have some business with Dr Prince. I am afraid that he has not been very honest with us and we have rather lost our patience.'

'What exactly do you want?' Asked Liz.

'Simply to have a quiet chat and then we will be on our way. We have tried to contact him by letter and phone, but he does not seem to want to talk to us.'

The fifth man then made his way towards Brendon who had two of the burly men framed on either side.

'You said that you would repay the money by the 21st. It is now the 25th. Are you able to settle the debt?'

Brendon looked down at his feet in embarrassed silence. His demeanour spoke as eloquently as any form of words. The fifth man stared at him for a moment and then unexpectedly seemed to adopt an expression that almost looked like sympathy.

'Ah well! What a pity.'

The tension amongst the farm crew intensified as they each realised the seriousness of the situation. Once again it was Liz who took control.

'May I ask what it is that you require, in order to leave us in peace?'

The fifth man smiled a sinister smile as he approached uncomfortably close to her.

'It's a simple matter of £35,762.'

'If I give you the money, you will leave?'

'Like summer mist. It will be as if we were never here, which is exactly what you will all say to anyone who enquires.' He

turned at looked purposefully at everyone.

'Very well, if you will come to my office, I will write you a cheque.'

'I prefer cash.'

'I'm sure you would, but a cheque will have to do.'

The fifth man looked carefully at Liz and then nodded. The two of them left the kitchen for what seemed to be a long time but was in fact, no more than a few minutes. When they did return, the fifth man was carrying a small piece of paper. He again nodded to his henchmen who visibly relaxed and started to make their way out of the back door. The fifth man walked over to Brendon and leant forward to whisper in his ear. But instead of saying something, he made a quick short movement with his right fist. Brendon bent double gasping for breath.

'Don't let me see you again.' He added in an acid tone.

Everyone in the room thought that was the conclusion of the unwelcome visit but Liz seemed to have other ideas.

'Just a moment.'

The man turned around. His expression betrayed surprise at hearing her voice.

'As I seem to habitually need to point out, this establishment is a high security area and yet you have wandered in oblivious of that fact.'

The fifth man looked puzzled.

'If you had bothered to check, you would have seen a large number of CCTV cameras, all of which are linked to the police. Given the highly sensitive nature of our work, I should imagine that they are already on their way. If you wish to have an opportunity to make use of that money, I suggest you make urgent plans to leave the country. Incidentally, you may wish to know that it is not the local constabulary you will have to deal with, but London.'

A clear expression of fear came over the man's face and a few moments later everyone heard the squeal of car tyres.

As soon as they had gone, the room erupted in a chorus of congratulations for Liz. Mike noted her smile a little for a

moment but then the moment passed, and the serious face of the director was once more firmly in place.

'Brendon, I want to see you now. Mike, I would appreciate your presence as well.'

Once they were back in her office, she closed the door before confronting Brendon.

'How are you feeling?'

'I am all right.' Brendon replied a little shakily. 'I will naturally, pay you back.'

'Indeed you will. I will be deducting half your pay until the debt is cleared.' Liz replied angrily. 'The point is what am I going to do with you?'

'Well, you will not be able to get your money back if you sack me.'

'Don't get cocky with me.' The venom in her tone surprised both Brendon and Mike. 'You do not seem to appreciate that you represent a serious security risk.'

Brendon looked puzzled but Mike knew where the conversation was leading and he was not happy. If Brendon was the source of the leak, then it would be better if he did not appreciate that he was under suspicion. Mike tried to catch Liz's eye but she ignored him.

'Have you been passing on secrets to fund your gambling?' Brendon looked suitably shocked. 'No, of course not. If I had, then I would have been able to pay off Baxter.'

'Brendon, you are addicted to gambling. Addicts are not capable of thinking rationally, just on their next fix. I repeat, have you been selling confidential information?'

'No.' Brendon replied firmly.

Liz sat down behind her desk and looked carefully at Brendon, evidently considering what she would say next.

'You will not leave the complex for any reason. If you do, I will report my suspicions to the police. Now get out of my sight.'

Brendon stood up and seemed as if he was about to say something, but then changed his mind. As soon as he had left,

Mike looked to Liz for an explanation.

'Why did I pay those thugs?' She said sensing Mike's unasked question. 'There is too much at stake to risk a police investigation which would surely have followed his admission to hospital.'

'I would have preferred that he did not suspect that we had him under surveillance.' Replied Mike coldly.

'Brendon is an addict. If we put temptation under his nose, he will find it impossible to resist no matter what the risks. Believe me, I know.'

She poured herself a glass of water which she sipped gratefully.

'You suggested some kind of test to find the leak. Very well, I agree and now if you wouldn't mind leaving. I have a lot of work to do.'

As Mike walked back towards the kitchen, he realised two things. Liz had shown a lot of bravery in the way she had handled the situation. Nevertheless, she had been clearly shaken by the turn of events. The second thing he realised was that there was more to her bailing out Brendon than she was saying.

Later that day everyone gathered once more in the kitchen. Bob had pulled together the results of the previous day's experiments and wanted to share them before planning the next stage.

However, the mood of the group was still subdued, and the entrance of Brendon simply added to the sense of gloom. Mike had a strong feeling that people would find it hard to focus on science instead of the subjects that really interested them. Firstly, there was the unnerving appearance of a shadow that should not have been there. In a curious way, people seemed to have been able to cope with the appearance of the extra shadow, perhaps because it was a familiar theme from gothic

literature. However, Jan's inability to take a picture of the phenomena with her mobile phone and its prompt disappearance from the wall, left everyone in a state of shock.

A bright sunny autumn day had now cast doubt on last night's certainties. Two entirely different worlds had collided, and people were still trying to come to terms with the consequences.

Bob had spread out a series of graphs and charts on the table, which people began to examine. He then stood up and cleared his throat in his best lecture room style.

'There are a number of outstanding questions which Jan's programme needed to answer. The first of these, concerned checking the speed of the electromagnetic wave. The equipment verified that in all the Noril'sk tests, our brains received a signal in order of proximity to the accelerator. The speed is close to that of light, which means we are looking for some kind of energy wave.'

'But definitely not infrasound.'

'No, nothing like that Mike.'

'Did the sensors pick up signals from all four tests?' Asked Jan.

'Yes,' Bob replied, 'and so did we, even if we did not notice anything.'

A thought occurred to Mike. 'Brendon, if we are dealing with radiating energy, do you think there could be some connection with the power losses?'

Mike had deliberately looked for an excuse to bring him into the conservation as a way of breaking through the barriers between Brendon and his colleagues.

'Yes, I think so.' He began hesitantly as if he no longer had any right to contribute to the group. I think the power loss is the cause of the diminishing effect of each test. All the electromagnets are computer controlled to ensure a constant force surrounds the accelerator tube. If one goes out of alignment, then the field from the next one will strengthen to compensate. So, if the field dynamics changed, then whatever

is escaping from the tube, would exit at a different point each time. Increasing the strength would reset the alignment, which is why we only felt something when the strength was increased.'

'Now that is a scary thought.' Observed Jan.

'What is?' Asked Claire.

'That something is escaping the accelerator.'

Claire's face turned white. I see what you mean.'

'The fact that something is leaving the containment field is not necessarily a cause for concern. The sensors picked up only a very low leakage.'

'There is no safe level for radiation and we are dealing with a complete unknown. We know what it is doing, but we have no idea as to the cause.' Said Jan.

At this point in the conversation, Bob thought that it was his duty to bring everyone's attention back to a more constructive line.

'That leaves us with the key question. What is happening to cause the magnetic field to flux, that results in the power losses. Brendon, do you have any ideas?'

'Not really.' Brendon replied gloomily. 'I do not think it is something that is directly affecting the magnetic field. I think it is more likely to be some kind of side effect.'

'Something?' Bob raised his eyebrows in surprise.

Bad choice of words.' Brendon smiled weakly. In theory, if the Noril'sk is creating some new form of electromagnetic radiation then the energy would have to come from somewhere. So, it could be drawn directly from the power grid or it could be coming from elsewhere.'

But that would mean that it is converting electrical signals from transmission to broadcast mode.'

'Well, all electromagnetism is broadcastable, otherwise we would fly off the Earth.'

'That is not what I mean.' Jan replied. If you are right and it is drawing power from somewhere, then whatever was causing the power to drain, has to be operating outside of the containment field.'

'Yes, it does,' observed Brendon, 'and here is another thing.' He looked directly at Bob. 'I was slightly misleading you all when I said that each test of the Noril'sk was having a diminishing impact. In fact, the levels of whatever it is, are increasing exponentially every time we use the same sample. It is the lack of directional control that is reducing the impact.'

'Is it indeed.' Bob replied.

'Can I ask a question?' Interrupted Mike.

'Of course, that is why we are all here.' Bob muttered in an unintentionally patronising tone.

'What has this mysterious electromagnetic force got to do with each of us seeing things?'

'You mean ghosts. For Christ's sake, let us be open about it.' Snapped Jan.

'Then let us call a ghost, a ghost.' Mike suppressed a nervous smile at Jan's unexpected reaction.

'If the radiation is causing our brains to increase the production of beta waves, then we could simply be hallucinating.' Said Bob.

'About the same thing?'

'Jan is right. The fact that we all saw the same vision, makes it unlikely to be a simple hallucination.'

'But not impossible and we are not sure we did all see the same thing.'

'Well, that should be easy to settle.' Jan's tone became impatient. 'Why don't we all write down or draw what we saw. We can then compare everyone's account.'

'I am not sure how scientific that would be. We have all had a chance to talk about it.'

'I have not discussed it with anyone.' Jan replied and she looked around the kitchen table. Everyone agreed. 'Claire, can we have some pages from your pad?'

Claire tore some blank pages from her writing pad and handed them round. There followed five minutes of furious scribbling as people tried to recall exactly what they had seen. As each one finished, they handed their pages back to Claire to

cross-check as she was the only one not to have shared the experience. It did not take her long to report back her summary.

'You all saw the same thing.' She said in a matter-of-fact tone.

'There you have it.' Jan cried triumphantly. 'Just as I have said all along, these are two are separate issues. The Noril'sk tests are not the cause of these apparitions.'

'Not necessarily.'

Jan looked exasperated. 'Good god Bob. What are the chances of us all experiencing the same hallucination?'

'Slim I grant you but not impossible.' He looked to Brendon's medical expertise for support. Brendon nodded his agreement. 'Besides which, I think you are missing the point. Whether or not there is a direct link, this is exactly the kind of thing that could be of interest to ASRI. It has the potential for all sorts of products.'

'You mean like mind control again.' Said Mike.

Bob ignored him.

'As we have a difference of opinion, can I suggest we pursue both lines. Jan, by all means, carry on researching whether your ghost is a physical manifestation. I will focus on finding out what form of radiation we are dealing with and how it could be stimulating a group hallucination.'

Mike had been expecting to spend a quiet afternoon in his room concocting an excuse for the latest delay in sending a draft article. Instead, he found himself hurtling down a narrow country lane in an old two-seater green Morgan. He looked across to Jan who seemed to be in a world of her own as she drove her beloved car. Despite the fact that he had only known her for just over a week, he had decided that she was the kind of person that could become a long term friend. In particular, he was fascinated by her many and varied interests such as

classic cars and the passion that she put into them.

The reason for his presence was due to the fact that Brendon had been confined to the house. After Bob's lecture and challenge to Jan, she had asked Mike to go to with her to the abbey at Sherborne where the ecclesiastical records for the Stours were held. Armed with her new knowledge about Lizzie Striker, Jan wanted to take another look at documents she and Brendon had seen.

It was good to get out of the house. In recent days, it had become an unpleasant place. The creation of a new schism between Jan and Brendon complicated an already difficult situation that existed between those who wanted further testing of the Noril'sk and those who thought it was dangerous.

Mike settled down to enjoy the cool fresh wind rushing through what was left of his hair.

A little over an hour later they drove into the car park at the abbey and made their way to a private entrance. Jan pulled an ancient pull-bell and a few moments later a young man opened the door. Jan seemed to know him well and they were quickly ushered through a narrow plain hallway which may once have been the servant's entrance and up a flight of stairs. They soon found themselves waiting in the far more plush surroundings of an ornate Victorian hallway as the young man disappeared through a large double door. A moment later he reappeared and they were escorted through to an elegant room. Mike had to stop to admire it. He loved gothic architecture, and this was the finest example not designed by Pugin that he had ever seen. The wall to wall and floor to ceiling bookshelves that dominated the room proclaimed this to be a library. Almost in the middle of the room was a grand leather faced oak kneehole writing desk and behind that sat a thin man in his early sixties dressed in the plain working robes of a bishop. Jan marched straight up to him at what seemed an alarmingly improper speed.

'Hello uncle.' Jan planted a large kiss on his cheek. He gently wiped it away but looked pleased to see her.

'Janet, nice of you to come and see an old man.'

'Jan.' Jan replied.

'Yes, of course Janet. I don't suppose this is a personal visit. Who is this young man you have brought to see me? Do you have news?'

Jan blushed and Mike found it hard to suppress a smile at her obvious discomfort. Jan was someone who took pride in her dispassionate nature.

'This is a colleague from the farm. He is a writer.'

'Is he indeed. I have a love of books I wonder if I have read any of yours.'

Mike stepped forward to introduce himself.

'I doubt it unless you read science articles. My name is Mike Jordan. I am a journalist.'

'Indeed, how fascinating. I am Roger Carraway. Janet is the daughter of my younger brother. Sadly, he died a few years ago. Very tragic. Since then I have tried to keep an eye on her, but it is very difficult as she rarely bothers to come and see me unless she wants something.'

Roger then winked mischievously. It was obvious that he and Jan doted on each other and Mike took an instant liking to him.

'Uncle, you mentioned that you might have time to go through the archives with us this afternoon.'

'I did.' He picked up a large red dairy which lay open on the desk. 'There you see. Janet. Keep free.'

'It's Jan.'

'That's right, you said so earlier. Now, what is it that interests you?'

Jan looked across to Mike and rolled her eyes.

'The letters of the Reverend Striker of Stour Provost to the Bishop of Warminster and the 1940s accounts.'

'So you said on the telephone but what specifically?'

'There are a couple of things. Firstly, I want to know whether the girl I saw is the same as the one seen by the Trenchard girl in 1645 and Elizabeth Carrington in 1941.'

'Then we had better take a look.' Replied Roger and he took them to a shelf that contained a number of faded leather bound ledgers.

He selected one volume and began to carefully turn over the yellow, ink faded pages until he found what he was looking for. This was an entry in a list of names and dates which catalogued all the documents held by the abbey.

'You are in luck.' Said Roger. 'This box is still in the library. I think that one of the students must have been using it.'

He then went over to an old and battered chest of drawers and took out a red box. He put on a pair of white cotton gloves before examining the contents. After some time, he set aside four sets of bundled pages each tied with a fragile looking bow of silk. Jan soon gave up trying to read the documents over Roger's shoulder as they were all written in Latin.

'This document contains a description of what it refers to as the Duncliffe lost soul. It describes a young girl, aged about ten and of piteous appearance. She had matted hair and ragged clothes.'

'Does it mention anything about a scar?' Jan asked tentatively.

Roger shook his head. 'Not that I recall but it does seem quite a substantive ghost. No white sheets or ethereal looking blobs.'

'What else does it say?'

'Eliza Trenchard... I assume that was the young daughter... had lately become afflicted and was much aggrieved by an apparition. Her father being a man well known in the district for his sober and godly disposition, did not at first believe his daughter whom he knew to have an imaginative nature. But after several months, Eliza had become much distraught and he approached the Reverend Morrison... He had replaced Striker who died not long after he buried his daughter... to ask that he provide whatever spiritual comfort as he may... There is quite a long passage here about the time spent trying to get the girl to admit that she was lying but Morrison obviously

concluded that a malevolent spirit had occupied the house.'

'Does the text mention anything about who the spirit was?' Asked Jan.

'No.' Roger replied with a degree of uncertainty as he quickly scanned the text. 'Ah wait, yes it does. The reason Morrison became convinced that Eliza was telling the truth was that she gave an account...Erm! Upon the spirit's left arm appeared a long and jagged scar. Its size and appearance did tally with a mark upon the arm of Lizzie Striker, the late daughter of the Reverend Striker also late of this parish. Ah! Now that is interesting.'

'What is?' Jan replied.

Roger made no attempt to reply but crossed the room to his desk where he picked up the telephone and pressed a single button. A moment later he spoke a few quiet and unintelligible words before replacing the handset and returning to Jan and Mike.

'My apologies for the interruption but I think you will find the results interesting.'

'What is interesting, uncle?' Said Jan once more clearly becoming impatient.

'You'll see.' Replied Roger mischievously. 'Now, where were we? Ah yes! I was reading a description of the spirit, but I do not think that was the one referred to as a malevolent presence.'

'Why is that?' Asked Jan, this time hoping for a straightforward answer.

'Despite the fact that people in those days were deeply superstitious, Morrison was a learned man. I think he was referring to something other than the spirit of a small child.'

Jan then turned to Mike who had been standing quietly observing the conversation.

'Mike, you will recall that I said Lizzie was terrified and appeared to be looking for something.'

'Rupert Everington perhaps?' Mike replied half in jest.

Possibly,' Roger sounded unconvinced, 'but somehow I doubt it. However, before I explain why, let us have a look at

the accounts of the exorcism.'

He picked up another set of papers and scanned through them first before translating the text for Jan and Mike.

'The feast day of St Marina was chosen as an auspicious time, she being the protector of sleeping children. I did prepare for the sermon which was to be administered in the child's room. A place where so often the restless spirit had been seen to walk. At second evening cock crow, the child was wakened and brought to the room which had been prepared as prescribed. Despite the closeness of the evening, I felt a chill about my face and hands and did ask for a posset.

Praise to the Lord, my prayers did summon the spirit whom I believe to be the same as described by young Eliza Trenchard. But despite my requests, Eliza refused to say a word either for or against the matter. For myself, the apparition was but a faint shadow, but I perceived it to be a soul that was in need of pity and help and so I tempered my prayers in a gentle manner so as not to cause the spirit distress, but to help it cross to the glorious kingdom. It took a full quarter candle to lay it at peace.

But my efforts nearly proved in vain. For just as it seemed to quiet, its movements became sharp and erratic and the mouth made to scream although no sound was heard. It was as if the spirit of the child had become afflicted by some other ungodly presence. Perhaps sent by Satan to tempt the child away from our Lord. The chill became oppressive and although no manifestation was evident, all within the room felt a malevolent presence. I was mindful of my duty to God and those poor souls who came to me for succour. I did change my plan and banish this other in such manner as befitted its undoubted black soul. Both did depart at the same time and I gave a prayer in the hope that Lizzie Striker is once more with her father at the right hand of God.'

Roger laid down the papers quietly and looked troubled.

I think it is clear that there is more than one spirit tied to that unhappy place.'

There was a knock at the door and a young clergyman came in with a tray of tea and sandwiches. The bishop directed him to a small table positioned between two large and faded sofas.

'Thank you Hubert. Janet. Would you and Mike like a cup?' Jan and Mike sat down on one of the faintly tobacco scented settees.

'Has there been any other record of a second spirit.' Jan asked.

'Not officially. But after you contacted John Morton for the second time, he came to me for advice.'

Mike smiled. I did wonder why you seemed to have all the papers to hand.'

Yes indeed. John has been the vicar for that parish for many years and before that, he served as the curate. He recollected that as a young man in the early sixties, he knew of a family in the village who had a son, Peter Ellis, who was confined to the St James' hospital in Portsmouth. He was suffering from some kind of mental health problem. In those days, such a thing carried an enormous social stigma and so John was often called upon to drive them to the station as they did not wish to use the local taxi service. It appears that Peter attended the school at Woodville not far from your farm. Like all boys, they dared each other at silly games and your place lay empty for several years after the Carringtons left. The boys would go there to smoke, break windows and dare each other to go into what they called, The Haunted House. Peter was a simple boy and he said that he would not only go into the house but would visit the cellar. The next thing that anyone knew was when the parents went looking for the lad who had been missing for hours. They found him frothing at the mouth and driven out of his mind.'

'My god,' interrupted Jan, 'did they get anything intelligible out of him?'

'Not really.' Roger replied. 'He did apparently mumble to himself for some time, but nothing that could be understood.'

'I don't suppose anyone found out what he saw?' Mike interrupted.

'I do not think so. We certainly cannot ask Peter. He died many years ago.'

'You said earlier that you did not think the second spirit could be Rupert Everington. Why is that?' Mike asked.

Roger got up and once more crossed the room to his desk where he collected another of the box files used to store the archives. He took out an A4 size file before returning to his seat.

'Janet must have told you that there are no records of Rupert Everington's execution. The prison at Dorchester was presided over by a man infamous for his corruption. I think it distinctly possible that he was bribed after the trial and released Rupert. I think it also likely that Rupert returned to Duncliffe Manor to resume his wicked practices. When in December of 1642, Striker referred in his letter to his parishioners at last finding peace, I think that was due to the villagers exacting their own punishment. However, I digress a little and you were interested in my view of why I do not believe Rupert to be the second spirit.

Unless there is a very good reason, people do not normally change their character substantially, but Rupert Everington appears to have undergone a complete transformation.'

'You will recall,' Jan interrupted, 'that I told you he had been described as a godly man when he first arrived.'

'I do indeed.' Roger confirmed. 'Although he seems to have had a very poor reputation for many years, it was only in the last two or three years of his life that he appears to have become evil. Actually, we only have Striker's letters as evidence that he was and Striker seems to have very much taken against Everington after he formed an unwanted friendship with his daughter.

This file contains part of a confession by Rupert as he

awaited execution. It is very fragmentary, but it does provide a clue to why Rupert changed from a sober man to an infamous killer.'

Roger then began to read an extract from one of the documents.

It is not man who will be my judge but God and God knows and sees all... There is a large section missing here, but it then resumes... At the day of judgement, it is not I who will be called to account for these deeds, but the Devil's servants whom he has most foully cast upon me for these past years. These malevolent whispering spirits.... And there it stops.'

'Schizophrenia?' Pondered Mike.

'Perhaps, or perhaps an indication that your farm's troubled history goes much further back than the 17th century.'

At that moment, there was another knock at the door and the young man returned this time carrying another large box file.

'Thank you. This is what I have been waiting for.'

'What is it?' Asked Jan.

'Records of a request for a second exorcism in 1941.'

'I did not know that there was one.' Replied Jan.

'There wasn't. The family decided to move out when their request was turned down. Let's see what it says.'

Roger began once more to quickly scan through old and faded papers.

'Here we are. April 22nd. The Reverend Michael Mates. I think I met a couple of times, charming man. John Carrington had been consulting him about his daughter since February when a German bomber dropped a small bomb on the cesspit. It seems that within a few days she was claiming to see the ghost of a young girl.'

'Is there a description?' Jan asked eagerly.

'No, and that is definite this time. It appears that whilst no one believed her, they were concerned that she was suffering from shock. The appearances became worse and just to placate the young girl, the family requested an exorcism.'

'But the request was turned down.' Mike observed.

'It was. The modern church takes a far more holistic view than our ancestors.'

'You said earlier that Jan would be interested in something in that box.'

'Quite right young man, Lizzie Striker was the only daughter of the Reverend Striker. The name of the Carrington girl was Liz, who was the only daughter of a retired army chaplain. Eliza Trenchard appears also to be the only daughter of James Trenchard a Presbyterian preacher in self-imposed exile, and Janet here is the only daughter of my brother who was also trained as a priest before his interests took him in another direction.'

Jan looked nonplussed, but Mike instantly saw the connection.

'Lizzie, Eliza and Liz. They are all diminutives of Elizabeth. Which would be interesting but Jan's name is Janet.

'Ah yes, but you see I christened Janet. Her full name is Elizabeth Janet Carraway.'

Bob was becoming increasingly impatient with the way that the experiment was progressing. He, Claire and Brendon had been hard at work since just after 7.30am. It was now close to 4.00pm and they had little to show for those eight and half hours of hard slog. The aim of today's tests had been to eliminate the lack of directional control of the electromagnetic waves, which the Noril'sk appeared to be generating. This was required to allow them to intensify the effect on their brain waves. Bob had hoped that increasing the effect would not only improve their chances to identify what it was that was being produced by the Noril'sk, but also to get a better idea of why.

The first part of the work had gone well. By lunchtime, they had managed to rewrite the software controlling the accelerator and could now direct the escaping force even if they did not know what it was. However, the afternoon had seen a rapid deterioration in their rate of progress. Bob had subjected both himself and Brendon to the newly increased wave intensity, but it appeared that neither of them was sufficiently sensitive to demonstrate an appreciable difference in their respective reactions. The two prime guinea pigs had gone off on a wild ghost chase.

Bob looked at Brendon with some sympathy as he sat cocooned within a shell of wires. He appeared thoroughly miserable and Bob could well understand why. Not only had his movement been severely restricted for several hours, but the coiled wiring was giving off an appreciable amount of heat. Bob was also feeling sorry for himself. Claire had been banished to the bunker and put in charge of the accelerator because she seemed to be completely insensitive, which left

him trying to both supervise the tests and oversee the computer readouts. At least he had managed to rope in Liz as note taker.

'Right! We will try once more. Experiment number 2/14. Let us hope its 15th time lucky.' Said Bob over the tannoy system. 'Claire, please activate on my mark. Three, two one, initiate.'

'Accelerator activated, speed building nicely.'

This was confirmed by a steady increase in volume of the background hum produced by the machine.

'Once we have full speed can you collide at the tenth?'

'OK.' Claire replied.

Bob momentarily switched off the mike that was attached to his shirt collar.

'Brendon. How are you feeling?'

'Hot. These wires are really beginning to warm up.'

'We will make this the last one and then there is an ice cold coke waiting for you in the fridge.'

'Ready to go in three, two, one. Did you get that?' Said Claire.

Bob looked at the computer. It registered the arrival of the electromagnetic wave and showed Brendon's brain print momentarily flashing with colour as it reacted.

'Did you feel anything?' Bob asked.

Brendon looked indecisive. 'Something, a momentary sense of unease, but no more than before.'

Bob let go of a deep sigh as he realised that it was useless to continue.

'Well, that's a wrap as they say in the films. Thanks for your patience.' Bob said in resignation.

'May I have a go?'

'If you like, Liz.' Replied Bob in surprise at the unexpected turn of events. 'I will hook you up. Claire, you can take a break. Liz has volunteered to take the test.'

It took Bob about an hour to extricate Brendon from the various wires and sensors and prepare Liz. Brendon resumed charge of the accelerator and Claire was now taking notes. As

he attached and checked the last of the circuits, Bob noticed that her heart and blood pressure readings were high.

'Are you feeling nervous?'

'A little.'

'That is understandable, but we need to get your readings to as near normal as possible. Can you take a few deep breaths?'

Liz did as she was asked and Bob noted a slight decline in her heart rate.

'Tell me.' Bob asked in a deliberately calm flat voice. 'Why do you want to take the test?'

Liz smiled to herself before replying. I do appreciate just how dull the routine work can be, particularly for a scientist of your calibre.'

'So, this is a bit of internal PR.'

'In a way, but not entirely. I think you are on to something important with this work. You obviously read the chemical analysis of the Noril'sk. I recall that in the 1970s they found that there was a missing 0.3 per cent of the mass that could not be identified. The reason for that of course, was because their sensor equipment could not keep up with the speed of chemical change. What they did not realise is that this stuff is unusual because it can produce short lived chain reactions.'

'Sorry Liz, I don't quite see your point.'

She paused for a moment before answering.

'Imagine this. The basic elements of the Noril'sk are, for the most part, common inert chemicals. It only becomes complex when subjected to certain external forces and at that point, the reactions seem to become self-sustaining, if only for a short while. Now, what else do we know of that follows a similar pattern.'

Bob responded with a look of sheer disbelief as the implications of what she had said sank in.

'You have got to be joking.'

'Why?' Liz replied. 'Not all life has to be based on the carbon model. Just think about it for a moment.'

I am thinking about it and it frightens the hell out of me. I

can already hear the shouts of charlatan.'

Liz extended a look of sympathy. She was only too aware of the consequences that a second scandal could have on all their careers.

'Bob, I am not suggesting that we go public, just that we keep an open mind. For example, I have been through the marker criteria to define life. One, does it feed? Yes, in that it seems to transform energy. It also appears to produce small amounts of methane as a by-product, although how it does that is a mystery. Two, does it grow? We don't know. Three, does it reproduce? Again, we don't know. Four, does it interact with its surroundings? Yes, it reacts to the energy output of the accelerator and modifies its surroundings by producing the methane which seems to speed up the reactions. Five, does it evolve? Again, we do not know. So, already we have two out of five.'

'You make a convincing argument Liz.' Bob admitted. 'All right. I will keep an open mind. In fact, more than that, I will look to see whether the Noril'sk sample has increased in mass since we started to bombard it.'

He finished adjusting the mesh of wires that swathed his director and returned to the computer to monitor the results.

'Brendon, are you ready?'

'Yes.' Came a disembodied voice. 'We are at full power.'

'In that case, proceed on my mark. I am just adding an extra programme to compare the measurements of the Noril'sk before and after the tests. I'll explain why later. OK! In three, two one, initiate.'

'Accelerator powered up.' Came the voice of Brendon over the intercom.'

'Then let me know when we have full speed.'

As the voices fell silent, each could hear once more, the faint but persistent hum coming from all around them. It sounded like an air conditioning unit building up speed and at the point at which the sound rose above the human capacity to hear it, Brendon's voice once more came over the tannoy system.

'We are approaching maximum speed and I will collide at the tenth.'

Abruptly, Liz became rigid. Her eyes glazed over, and the colour drained instantly from her face. It took Bob a moment or two to notice what was happening, but as soon as he did, he shouted to Brendon to cut the power. Liz became limp for a few seconds as if the life had been drained out her. Then she threw up.

Bob frantically pulled the wire mesh from her body whilst Claire ran to fetch some water.

'I'm so sorry Liz.' Bob whispered. 'Are you all right? How do you feel?'

For a moment, she did not reply and Bob noticed that her pupils were dilated as she stared blank-faced into empty space. Then slowly she emerged from her torpor and seemed to become aware of her surroundings.

'Liz,' Bob said once more, 'can you talk? Are you OK?'

'I think so.' Her voice was barely audible. 'What happened?'

'I was hoping you could tell me. Can you remember anything?'

'Don't you think I should take Liz to the bathroom?' Claire interrupted in a firm voice.

Bob looked down at the mess on her clothes and nodded, red-faced at his lack of consideration. About half an hour later he and Liz were sitting in her private rooms. She was looking better but still had a greyish pallor about her.

'How are you feeling now?' He enquired.

'Much better thank you.' Liz replied. 'You are going to ask me what happened. I am sorry to disappoint you but I cannot remember, at least not clearly.'

'Then perhaps you can tell me what you can recall.' Fear.'

'Liz forgive me,' Bob tried to sound sympathetic, 'but can you not provide anything more.'

'Always the scientist Bob, how naive of me to think otherwise.' She paused for a moment as if she was struggling

to recover an unpleasant memory. 'Everything happened so quickly. It was as if a long nightmare was squeezed into a second. I seemed to experience all my phobias, unpleasant memories and bad dreams within a single blinding vision. I felt an overwhelming sense of terror which resulted in... well, you saw the results.'

Bob nodded but said nothing.

'What about the computer readings. What did they reveal?' Bob acknowledged Liz's question but did not answer until Liz pressed him.

'Your scan was unusual. I am sure that there is nothing to worry about, but the readings appeared to indicate a momentary psychosis.'

'You mean I went mad.' Liz replied.

'No.' Bob smiled reassuringly. I would say that the normal function of your brain was disrupted. The readings were not dissimilar to the patterns shown by someone suffering from an epileptic fit. Except that there were no motor reactions...other than being sick.'

'Perhaps we should seek the services of a psychiatrist.'

'That's not a bad idea.' Bob replied having failed to detect the irony in Liz's voice. 'If we are generating artificial forms of psychotic behaviour, the implications could be enormous.'

There was a momentary pause.

'I get the feeling that you have not told me everything.' Liz asked.

Bob smiled once more, but this time it contained a faint trace of guilt. 'No, you are quite right. It looks as if your life hypothesis is one step nearer becoming a theory. The sample showed a small but definite increase in volume and weight. Also, the methane bi-product increased. Whatever this thing is, it certainly made a meal of you. That means on our life scale we have either proved that it grows or that it reproduces.'

'In either case, we now have at least three of our criteria.'

'There is more, the reaction period doubled. Instead of simply generating a one-way reaction, it briefly became a two-

way process.'

'Then I was right about its ability to create a self-sustaining chain reaction.'

'In a way, yes. Somehow the energy output changed. It modified itself once it received feedback from your brain. I do not understand how or why, but there were two distinct stages.'

'Which means that we could have all five markers.'

Both fell into a prolonged silence as they considered the implications of that last statement. It was no exaggeration to claim that it was a culture changing statement if it was true. If it was true and that was still a long way from being established.

I think for the moment that we should keep this to ourselves. At least until we understand a little more about what is going on.'

'On this occasion, you will get no argument from me.' Bob concluded.

Mike was enjoying the ride back from Sherborne. Although there was a distinct chill in the early afternoon wind as they sped along the A30, it was more bracing than cold. The Morgan generated a satisfying growl, but it was still possible to enjoy the normal country sounds coming from the fields either side of the road.

Jan had taken the news concerning the coincidence of names quite well and appeared more intrigued than anything else. Evidently, the scientist in her had processed that bit of information. In fact, she had reacted far better than her uncle whose parting remark betrayed a substantial concern for her welfare.

Mike had also learned something intriguing, something of a personal nature. The normal composed character that Jan liked to display had vanished without a trace when she was talking to the old boy. Actually, she became almost girlish and he had rather taken to that side of her, much to his surprise.

An annoying sound interrupted his train of thought and it took a moment for him to realise that his phone was ringing.

'Hello... Yes... Look, you'll have to speak up. I'm in a car.....No, I am not driving but it has an open top. Can I ring you later... Oh... OK.' He turned to Jan. 'Would you mind pulling over. I can see a Little Chef just up ahead.'

Jan did as she was asked and parked.

'Hi, can you repeat what you said earlier... Oh! It's you. I didn't catch the name. What's the problem?'

Mike remained silent for some time as he patiently took in the call whilst Jan tried to find something interesting to look at through the window to show that she was not listening.

'Look, this is a little awkward. I am in a friend's car and I can't discuss this now. However, I will give the matter some thought and call you back... No, it will not be today......I have other business to attend to... Yes, I understand, but cobbling together a solution is unlikely to produce the results you require..... Yes, I will.'

Mike watched the phone display to ensure the caller had rung off before returning it to his pocket.

'I'm sorry about that, another business matter.'

Jan smiled weakly. 'Then I won't pry.'

'Thank you.' Mike replied. 'Whilst we're here would you care for a coffee or a tea?'

'Why not, that would be nice.'

They both got out of the car and made their way to the restaurant. By an odd coincidence, it was one that Mike had stopped at a number of times on his way either to or from the West Country. It was not that there was anything special about this place. It was an ordinary chain outlet just like many others up and down the roads of Britain. However, it was conveniently placed, which was why it always seemed to be busy. They stood in the foyer area for a moment until they caught the attention of a small grey haired waitress who guided them to a table near a window. She handed out two large plastic covered menus.

'Do you want anything to eat?' Mike enquired, waving the menus towards her.

'No, tea will do fine.'

Mike handed back the two menus and ordered as they sat down.

'I was sorry to hear about your father. I had not realised that he had died.' Mike suddenly felt very self-conscious. 'Sorry, you don't mind me talking about it, do you?'

'I don't mind. It was a very long time ago, at least for me. Actually, I barely remember him.'

'And what about your mother?'

'She died at the same time. It was a car crash.'

'You must have been very young?'

'I was five, which is why I have so little memory of them. Oddly, I can remember my father's face but not my mother's, although I have seen many photos of course. And you do not have to be sympathetic. As I said, it was a very long time ago.'

'Who brought you up?'

'My grandmother. She was a lovely woman and did her best but, in the end, having responsibility for a young child was simply too much.'

'What happened then?'

'I was packed off to public school.' Jan replied gloomily.

'You sound like you did not enjoy the experience.'

'Not much. Look, can we change the subject?'

'Why not,' Mike replied, 'what would you like to talk about?' 'Tit for tat, how about you? Where did you go to school, are your parents still alive and why did you become a journalist?'

Well, in strict order. I went to a Catholic school called St. Peter's which I also did not enjoy much. No, and because creativity is something I rather enjoy. Like a lot of people, I drifted rather than planned any sort of career. As a student, I set up a college rag and did a bit of stringing. From there I got a job working for a local newspaper before going up, or some might say down in the world by working for a couple of tabloids. Then I had an amazing piece of luck. I had always had

an interest in astronomy and was asked to do a piece on the British Rocket Group which was funded by the government. There was some talk about bringing it under the control of the military. The group strongly opposed any such connections and they were very keen to use me to publicise their arguments. One article turned into several and the plan was dropped. That gave me a lot of connections to the movers and shakers and I started to specialise.'

'I suppose that involved a lot of travelling. Is that why you are not married?'

'Wow! Where did that one come from?' Mike drew back in surprise at this unexpected turn in the conversation.

'I am a woman.' Jan smiled at his obvious discomfort.

'Evidently. I was married but she died a few years ago. Ah! Here are our teas.' Mike said, grateful for the disruption, but if he expected Jan to be diverted from her questioning, he was to be disappointed.

'You were telling me about your wife. Do you mind talking about her?'

'Not in the least. We had been separated for some time before she became ill. My lifestyle got in the way, but we stayed good friends.'

'And what about since then, any girlfriends?' Jan poured some milk into her tea and Mike noticed the same twinkle of mischief in her eye that he had detected in her uncle Roger. He concluded that it must be a family trait.

'Not really.' Replied Mike becoming determined not to give anything more away.

'But you have recently split from a relationship.'

Mike said nothing for a moment, but his determination was rapidly dissipating in favour of his curiosity.

'OK, I will give you that one. How on earth did you know?' 'Simple.' Jan's look of mischief had been replaced by one of triumph. 'Whenever you get a call, you always answer it from where ever you happen to be. Even if it is a secret one like the call you took in the car. But on four occasions you got a

different ring and then you left the room.'

Mike felt as if he had been had.

'I had no idea that I was so easy to read.'

Jan tried to smile reassuringly.

You're not and I can't claim the entire credit. It was Claire who first noticed. To be honest it was her who goaded me into getting some information on your background.'

'Why would she do that?'

'Because you are interesting. After two years of being cooped up with the same people, any man would be a diversion.'

'Thanks.' Mike replied glumly.

'Sorry. I didn't mean it to come out that way.'

'What else has she noticed and asked you to check up on?'

'Nothing, although she has noticed your obvious interest.'

'Now that is unfair.'

'You deny it?'

'Yes, no. OK, she is very pretty but my god, I'm much too old for her.'

'Hmm,' Jan mused, 'never take a woman for granted. Shall we change the subject?'

'I think that would be a very good idea.' Mike replied.

'There was something Uncle said this morning which you probably would not have considered very important. Not knowing the area. But the more I have thought about it, the more I think it is more than simple coincidence.'

'What is that?'

'There are just a few families that live around the farm and most of them have been there for generations. The man that delivers our groceries is called Mark Ellis. The last time I saw him, he was telling me that an aunt had come to stay. Her name was Mary. She apparently lived in the area as a child, but then moved away to be near her work.'

'And you think that she might be related to Peter.'

'It's certainly a possibility. The other curious thing is that she was a nurse and she lives in Southsea.'

'Which if I recall correctly, is the part of Portsmouth where the hospital that Peter was confined too, is situated.'

'Intriguing, isn't it?'

'Do you know whether she is still there?'

'No, but we could stop off on the way.'

'Jan, if you ever decided to give up science, you would make a first class journalist.'

About twenty minutes later Jan and Mike parked in a small cul-de-sac of post-war social houses. There were around half a dozen plain brick boxes which contrasted strongly with the local country houses and farmsteads. It was clear that all had been bought by their owners at some time since the great sell-off of the 1980s, as each had their own individual front doors and some had been fitted with modern plastic double glazing but this did nothing to disguise their true origin.

Mike opened a rusting gate but allowed Jan to lead the way through a well-tended, but functional garden. She knocked on the door a couple of times before it was answered by a frail looking elderly woman.

'Yes?' The elderly woman began cautiously. 'Mark is out on his rounds.'

Jan tried to smile reassuringly. 'Are you his Aunt Mary?'

'I am but I can't help you, I'm only visiting.'

Mike decided to step in and use his journalistic charm.

'Actually, it was not Mark we came to see but you.' He took out a Press Association card from his wallet and handed it to her. She peered at it suspiciously. If am a journalist and I am doing some research on the ASRI place down the road. I wanted to find out about the local history, and I have been told that you are the only person around here who can provide first hand memories... well, apart from Seb Morgan.'

'That old fool.' The woman's face visibly brightened as her interest was piqued. 'He's all right when he's sober and that

isn't often. Come in my dears.'

Mike winked surreptitiously at Jan. The woman showed them into a large well-lit and plainly furnished room where she sat them both down on an old faded sofa.

'Would you like a cup of tea?' She asked.

'Thanks no. It's not long since we had one.' Jan replied.

'So, you want to know about the local area. Had you anything thing specific in mind?'

'Seb was telling me about the people who lived at Duncliffe Manor after the Carringtons moved out.'

'Was he now. I bet he couldn't remember their name.' She smiled maliciously.

'Actually no, you are quite right about that.' Mike laid the charm on as thick as he dared.

'No, thought not. Well, it was Colonel Vernon-Harcoutt. He bought the place in 1946. Chairman of the Parish Council and the cricket club he were. Had a great big handlebar moustache. When he died, the place was bought by a young farmer and his wife. They were new to the area and set up a dairy farm. What was their name? Turner. That was it. Jake and Maureen and they had two boys called Tim and Ben.'

'What about the Carringtons. Do you remember them?'

'Not well. I was only a little girl then. I did visit the house a couple of times after they moved in. They had a daughter called Elizabeth who was just a bit older than me.'

Mike became very interested. This was their first proper evidence from someone who had known the main characters.

'Can you tell me what they were like?'

'Mr Carrington was a nice enough man. In fact, he was very nice. Strict of course as they were in those days.'

'And what about Elizabeth?'

'She was a bit strange.'

'How do you mean?'

'Well... aloof and quiet. A bit introverted. She was also a bit of a liar. She used to make up stories.'

'About ghosts?'

'Yes, we all thought that it was just one of her stories at first.' 'What was one of her stories?' Mike questioned.

'She had a party. A birthday party it was. April 20th. I remember the day because it was the same as Hitler. None of us wanted to go but the Carringtons were quite wealthy and there was a good chance of getting sweets and cakes and all sorts of things we hadn't tasted for many years because of the war. Actually, it was a bit of a disappointment. Anyway, she had one of her fits.'

'Fits?' Mike interrupted.

'I don't mean seizures. I mean the kind of thing that people called fits in those days. We were sitting at the table eating our tea when she suddenly went rigid. Her eyes became wide and fixed as if she was staring at something.'

'Was anything there?'

'Lord no, of course not. Although Lucy claimed to have seen something and she was not the sort to lie.'

'Do you know what it was they saw?'

'Not from Elizabeth. I never saw her again and they moved out soon afterwards. But Lucy said she saw a shape that looked like several people all merged together.'

'Several!' Jan exclaimed.

'Bit like my Peter.'

'Your Peter?' Jan tried to keep a straight face at the same time as showing interest.

'I had a younger brother called Peter. He were a sickly boy. What they used to call retarded, but in fact, he had very basic learning difficulties as I later learned when I became a nurse. He always wanted to be accepted by the other children and that led him in into difficulties trying to prove himself. One day, for a dare, he went into the cellar of Duncliffe Manor. It had been empty since the Carringtons left. The next time we saw him he had had a complete mental breakdown. His personality had collapsed.'

'And he saw the ghost as well?'

'I don't know about that. He never spoke again except for

one word which he kept repeating. Noril'sk and that was strange.'

'Noril'sk?' Mike echoed in a matter-of-fact tone trying not to betray that he was familiar with the word.

'Everyone thought he was just mumbling nonsense. After the war, I trained as a nurse and because of my brother, I went into mental health care. In those days, there were not many hospitals that actually tried to care for the mentally ill and so I found myself working in the same place that Peter was. He never recognised me of course.

The doctors were puzzled by his one word. It did not seem to make sense and so everyone put it down to his condition making him spout nonsense. But a few years after he died, we had another patient; a young student from Southampton University. As far as anyone could gather, they had been carrying out some sort of experiments which had gone wrong. One had been killed and the other two injured. The boy never recovered. He was not one of my patients, but I heard a rumour that he was saying the same word over and over again.'

'Noril'sk.' Said Jan, trying to be helpful.

'That's right. It seemed too strange to be a coincidence and so I spent some time looking for the word in the library, but all I came across was a reference to a small town in Russia. Then of course, all the papers got interested when all them scientists died.'

'When was this?' Mike asked.

'Early 70s as far as I can recall. I remember the boy very well. He was a nice looking lad called John Stewart.'

As Mike and Jan returned to their car, both had the same thought going through their minds. How had a boy living in rural Dorset become aware of a Russian meteorite, years before the Soviets publicised its existence?

Jan and Mike arrived back at the farm a little after six, which

gave them both plenty of time to freshen up before dinner. However, before Mike could return to his room, he had another matter to attend to. Liz was still hard at work in her office as he knew she would be. He also knew that she would neither welcome being disturbed nor the news he had to impart. Nevertheless, it had to be done.

He knocked on the door and then went inside without waiting for a reply. True to form, Liz looked irritated at his presence as he sat uninvited in one of the chairs that stood opposite her desk.

'Can you be sure that Brendon has not been out or indeed been in touch with anyone?'

'I can but why do you ask?'

'Because we continue to have a problem.'

Liz closed her eyes in weary recognition of what that problem was. Nevertheless, she asked just in case her assumption was blissfully incorrect.

'I had a call from our mutual masters this afternoon.' Mike continued. 'It seems that one of your competitors has got wind of the experiments you are carrying out on the Noril'sk. It will of course, be denied that you even have a sample since secrecy was a stipulation of your company's contract with CERN. But it is clear that either Brendon has been making unauthorised excursions or you have another mole.'

'Thank you Mike. That piece of news is just what I needed to hear.' Liz replied sarcastically.

'Who else has left the grounds over the last few days?'

'Everyone, except for Dr Stanton of course. I don't think he has been out since before last Christmas. What are the circumstances?'

'Understandably, they were not very forthcoming. As far as they are concerned this place is a major security risk.'

'Which is, I assume, why they have not had the civility to inform me. After all, I am only the director.'

'I am afraid that you are one of the suspects. In fact, I should not be having this conversation with you. And I wouldn't be if

I did not need your help.'

'What do you propose?'

'A reversion to the original plan. When are you due to dispatch the next set of routine results?'

'Today. As usual, everyone will have until 4.00pm to submit their data. I will collate it and place it in the secure server.'

'Then everyone's password will be changed.'

'Yes.' Liz replied in a puzzled tone.

'I want you to follow that routine, but this time I will give you a different password for each person. That password will give each access to a cloned server drive that contains slightly different information.'

'I see. So, that will allow us to pin down the source, but how will you know when and what information is being passed.'

Mike said nothing but smiled faintly and Liz knew exactly what was meant by that.

Dinner had been a short affair for which Mike was grateful. The usually animated conversations about work had been subdued by a feeling of frustration experienced by everyone except himself and Jan. Mike was additionally grateful for the sombre atmosphere because it allowed him to retire to his room early. He had bought himself a bottle of whisky and was looking forward to a quiet evening of listening to the radio and working on his articles.

However, now that the day was over, Mike was beginning to doubt that he could focus. He was far too intrigued by Liz's apparent dramatic change of heart about testing the Noril'sk and her sensitivity to its effects. He was even more intrigued by the fact that a group of highly educated scientists were treating a potentially dangerous source of radiation in such a cavalier way.

No one disputed the peculiar history attached to the Noril'sk and yet CERN seemed only to be concerned about its PR value

whilst ASRI could not see beyond a potential revenue source. Everyone at the farm believed that it was producing some kind of electromagnetic wave that was interfering with normal brainwave patterns, even if some had doubts that it was the cause of Jan's hallucinations. Yet they blithely continued the experiments. Today was a prime example of that folly. Not only had Liz been made physically ill, but the substance itself appeared to be growing. Mike's many years of journalistic experience was sounding a clear warning bell. That same bell should have been sounding even louder to the likes of Liz and Bob, yet they seemed to have turned deaf.

Mike closed the door to his room gratefully behind him and lay down on the bed. He stared at the patch of slightly darker wallpaper on the wall above the fireplace. The prankster, whoever he or she was, had left him alone for some time now. Perhaps they had got bored or just decided that he was a nice person after all. But that wasn't quite right. He had actually seen the picture on the wall when in fact it was still wrapped in brown paper at the bottom of a locked wardrobe. Given that it happened just a few hours after testing the Noril'sk, it was possible that he also had been affected by their experiments, just as it had made poor Jan see ghosts. At least that was what he had believed at first. Now he was not so sure that what Jan saw was a simple hallucination. There were so many details that she had recounted prior to them being confirmed by the archives. Of course, it was possible that she had read them and then forgotten, but that was an unlikely scenario for Jan. That would be the equivalent of her forgetting that two plus two equals four. Was it possible for the Noril'sk to induce visions of the past, or perhaps even provide a way to get in touch with the dead? Mike shook his head in bemused denial. That was too much to take seriously. Yet, if Jan was suffering from nothing more complicated than induced hallucinations, then so perhaps was he.

This uncomfortable line of thought drove him to think of something else and his thoughts switched to Claire. Jan's jibe

about Claire being aware of his interest had shocked him. It was one thing to have private momentary fantasies and quite another for someone to think that they might be acted on. He had been very self-conscious at dinner, sitting at the far end of the table and deliberately avoiding looking in her direction. It was all very silly.

Mike flinched. He felt very woozy as if seeing everything through a film of water. Clearly, he had been overdoing it. He stood up slowly and put the untouched bottle of whisky in a drawer before making his way to the bathroom. He turned on the tap and pulled the lever to close the plughole. The hot water filling the sink began to steam up the mirror above and he wiped it with a piece of toilet paper.

'Not bad.' He thought to himself as looked at his reflection, for someone who had turned fifty today. He still had quite a bit of his fairish curly hair, unlike most of his male friends. He had even managed to keep his figure, more or less, although he had to admit that it was mostly more.

Mike washed his face and neck and then reached over the sink to the rear shelf to pick up his toothbrush and toothpaste. By the time he looked up at the mirror, it had steamed up again. He grabbed another piece of toilet paper and began to wipe the mist away once more. As he did so, something familiar caught his eye. His heart began to race, and his hands became cold and clammy. He looked quickly around towards the fireplace wall. It was empty. But when he turned back to the mirror, he could see the painting of Rupert clearly reflected. The look of malice in those eyes was unmistakable. For a moment, Mike did not know what to do. He seriously doubted what he was seeing but when he looked at the mirror, the picture was there.

'Come on pull yourself together.' Mike said out loud hoping that the sound of his voice would jolt him back to reality. But it had no effect. Mike took a deep breath and turned around to go back into the bedroom. He walked slowly but with determination towards the wardrobe and opened the door. Sure enough, sitting on the bottom shelf was a large brown

package securely tied with thick string. Mike placed his hand on the edge and squeezed. He could feel the outline of the frame.

'Damn.'

There was nothing for it but to return to the bathroom and look into the mirror. He could not believe that such a simple action could inspire so much fear. He felt sick with anticipation as he stepped through the door. As he positioned himself in front of the sink, Mike had to force himself to look. It was not there.

The next morning Mike set off for a Hampshire village just north of Portsmouth called Denmead, where John Stewart had grown up and where his parents were still living. Yesterday's conversation with Mary Ellis had awakened a memory and a few phone calls established that he might find some answers in this unlikely backwater.

Late autumn had decided to finally make itself felt with a mixture of thick cloud, cold winds and drizzle. Although the drive was not a long one, the weather made the first leg through narrow country roads, tediously slow until he reached the motorway.

His first destination was to be the library in a small town just south of the village. Given its size, the place was well signposted which was more than could be said for any local car parks and it took him another twenty minutes of driving around the outskirts before he located one.

The town itself consisted of a single sixties style pedestrianised high street bounded by colourless suburbia. It was a functional, moribund place on the outer limits of the city of Portsmouth and seemed a very unlikely place to house a collection of scientific papers.

When Mike found the library, it turned out to be far bigger than he anticipated would be required to meet the needs of

such a small community. It consisted of a four storey modern stone building with small slit windows of the kind that preoccupied the less imaginative times of the 1970s.

Mike made his way to the floor where the local reference section was situated and asked one of the librarians if he could see copies of any locally published research papers. The librarian duly brought a small dusty box of microfiche and then showed him to one of the viewers housed in a private study area.

Mike was not sure what he was looking for other than the name of John Stewart and a reference to meteorites from the Soviet Union. At first, he scrolled through the film trying to familiarise himself with the layout of the information. He then settled down to the long, slow and tedious process of reading the text.

As his brain switched to automatic, Mike's mind struggled for some kind of stimulus and began to pull in all kinds of distracting information. The library had the usual smell of books and people, which is just what you would expect, but it also had a very faint underlying aroma of something familiar yet out of place. It was quite a while before Mike identified the smell and when he did, it seemed quite logical.

The view from the windows was uninspiring and provided little distraction from the seemingly endless dark grey lettering on pale grey backgrounds. Neither did the library customers yield any point of interest apart from their unusual dedication to the gardening sections of the shelves.

Instead, he began to think about what the team might be doing this morning. The recently upgraded Large Hadron Collider was due to be launched in just a few months and ASRI had a substantial contract to deliver. From the few snatched pieces of conversation Mike had overheard this morning, he was presuming that recent activities had begun to have an effect on delivery commitments. If that were so, then it may well be that any work on the Noril'sk would have to be delayed which was no bad thing in his opinion.

Mike looked at his watch. Time seemed to have slowed almost to a stop. He was just trying to decide whether to stop and find a café when a reference caught his eye. It was a student paper from 1975 which included a reference to John Stewart. It mentioned a date of August 1973.

Mike looked through the roles of microfiche containers and found one that included that date period. He loaded the new film and scrolled forward until he found the paper he was looking for. It was proposing an idea that the complex chemicals, which enabled life to begin, could have resulted from the collision of simpler elements in space. These were then seeded on Earth by meteorites or comets. Although this idea was now widely accepted, it was quite advanced for a student of the 1970s. The paper was highly speculative although it did include some experimental data to support the contention. However, what was particularly interesting was a handwritten note at the end. It referred to the series of experiments that had ended in the tragic accident and the mental breakdown of the author. At least now Mike had something tangible to discuss with John's parents.

There was still over an hour to go before his appointment and he decided to fill the time by having a look around John's childhood village. As a journalist of over twenty-five years' experience, he knew the value that such background information could bring.

As Mike left the small town behind, the suburban landscape soon gave way to green fields, a few of which were occupied by Holsteins. His stay at the farm had made him sufficiently familiar with livestock to wonder why they had not yet been taken indoors for the winter. He also had an answer for the source of the unexpected smell at the library. Mike had not realised how close he was to open countryside. About five minutes later the fields gave way to houses once more. This was evidently a large village quite unlike the very rural area he had become used to.

Mike still had some time before his appointment and so he

searched for a place to park the car and then began to explore the area on foot.

Even though he had no knowledge of the village, it was evident that recent years had seen considerable development. It had the typical feel of money superseding tradition. Small bland box buildings sitting side by side with 18th century flint and Victorian red brick houses. He could not imagine his 1970s student recognising much of the place that would have been an integral part of his childhood.

As Mike walked along the main road towards the centre of the village, the modern buildings were gradually replaced by recognisably English rural architecture. He passed a white coaching house that sat at the end of a fork in the road. It had a tiny beer garden that seemed as inviting as a motorway grass verge, as cars raced by within a few metres of the well wrapped smokers.

Within a few minutes, he had reached the heart of the village. Both sides of the road were lined with shops although most were vacant. On the right hand side of the green was a charming thatched cottage and beyond that, the fields resumed once more. This was obviously a place which had seen better times and although Mike was a committed townie, he found the reality of rural degeneration rather sad.

Mike looked at his watch and turned around to make his way to the house of the Stewarts which he found down a narrow tree-lined lane. It was a large house, set back from the road and partially hidden by a high thick hedge. There was an overgrown pond in the front garden that looked large enough to drown a medium sized transit van.

Mike rang an old fashioned pull type doorbell and it was answered by Mr Stewart, a frail elderly man, who escorted him through a patchwork of interconnecting rooms to a bright, comfortable lounge that looked onto the rear garden.

'May I offer you a cup of tea?' Asked the old man.

Mike declined. 'It is very good of you to see me.' He said, using his best journalist charm.

'John was our pride and joy. He was the first in our family to make it to university. The shock of losing him has not diminished with time. We both feel that.' He put his hand on that of his equally frail looking wife who was sitting in a chair next to his.

Mike had made a snap judgement that she was suffering from Alzheimer's. She had shown no reaction to his arrival but seemed to be fixated on a bird table clearly visible through the French windows.

'As I mentioned in my telephone call,' Mike began, 'I am interested in the events surrounding the Noril'sk meteorite and what happened in the early seventies. There were seventeen deaths that came close to scuttling the SALT nuclear arms reduction talks. Yet forty years later almost no-one has heard of it which I find very surprising. I have seen the official report, which is not very forthcoming and so I would be very interested to hear your account. Could you tell me something about what happened... at the University?'

It was all a long time ago.' The old man spoke in a quiet, resigned tone. There was an enquiry of course, but they reached an open verdict. Once John had been taken to that place, they just wanted to sweep it all under the carpet.

'Who did?' Mike asked in a puzzled tone.

'The university, the police, the government.'

'Do you have any idea why they would want to do that?' Mike asked beginning to become a little sceptical at the direction the conversation was taking.

This was the 1970s, young man. I don't suppose you remember those times. The Cold War was just beginning to thaw after more than twenty years. On the back of scientific and academic exchanges, they had begun to explore nuclear disarmament, as you said. Then it all went wrong. People died or became ill like John, all because of a material that the Soviets had sent out. The newspapers were full of hysterical, half-baked conspiracy theories to which the Russians took offence, understandably. The western governments became very

concerned about the damage to improving relations and wanted everything hushed up. All of a sudden, information became classified and the coroner had little to go on. It was all a whitewash.'

The old man paused for a moment.

'I can see you are sceptical, but this isn't just the ramblings of an old embittered man. I even had one of them here.'

'Really?' Mike responded hoping that he did not sound too incredulous.

'Yes, a few weeks after the inquest. A Chinese chap turned up at my door. Very polite and like you, very interested in John's work. I thought it strange given that China at the time was a strict communist country, but he showed me a whole load of official papers and already seemed quite knowledgeable.'

'Do you have any idea what your son was doing with the Noril'sk?'

'Only a little, I found some papers at his digs. Most of it I did not understand, but as far as can gather, his team were working on how organic matter could have evolved from simple compounds. The inquest confirmed that they were experimenting with particle collision and it was having unexpected side effects. Particularly on a girl student who was working with him.

'Who were the other people in his team?'

'His lecturer was called Professor Phil Meredith and the other student was Angela Turner.'

'And what happened to them?'

'Meredith died. Heart attack as it turned out. Angela Turner spent some time in St James but she recovered. I have no idea where she is now.'

Mike made a mental note for later. If he could find this Angela Turner, she might be able to provide him with valuable first-hand insight.

'You mentioned some papers. Do you still have them?'

'A few. I kept everything for many years, but then it began

to seem unimportant and I could not bring myself to throw them away. So, I let the library in Waterlooville pick through to see what they wanted.'

'Do you still have the others?' Mike replied finally understanding why the documents were in such an unusual place.

'They're in a box somewhere. I could try to find them if you are interested.'

'Perhaps later.' Mike replied. 'For the moment, I am more interested in your views on what happened to John.'

'I am not sure I can be of much help. For a long while, I thought that the university had been negligent. I thought that they should have ensured their people were safe. But you can only remain angry for so long. I even did a bit of research.'

'And what did you find out?'

'That not everyone who came into contact with that stuff, came to harm. It seemed that it has to be subjected to high speed impacts and even then, only in certain locations. None of it seemed to make sense. It didn't make sense to the experts at Cambridge Electronics either, which is why they said at the inquest that the meteorite could not be the cause of the accident.'

'Sorry,' Mike interrupted, 'who are Cambridge Electronics?' 'As I far as I could work out, they provided financial support to the university and had acted as a coordinator between the Soviet and British Governments. They were called by the coroner to provide evidence once it became known that scientists in other countries were being affected. Frankly, they were not convincing, at least not to me.'

'Why was that?'

'Because they skipped over a lot of things. For example, I later found out that the danger levels were connected to the number of times the material was subjected to impacts. But it had to be over a short period of time. If you left it for too long, the effects dissipated. John and the others were badly affected because they repeated their experiments in one afternoon.'

Mike made another mental note to discuss that point with Jan.

'I think that the Noril'sk contains some sort of inert material which only becomes toxic under impact. Perhaps some sort of gas as it seems to build up and then dissipates once the experimenting stops.'

'That is quite a specific hypothesis. Did you find any supporting evidence?'

'I did. I have had a fragment for over forty years and have felt nothing.'

'You have a fragment?' Mike repeated in an incredulous tone.

'There was a small piece amongst John's effects. At first, I kept it in the shed. I thought that it might come in useful if the enquiry got anywhere. I even had it analysed. But they found nothing.'

'Do you still have it?'

'Yes, it's in the box I told you about.'

After leaving Mr Stewart, Mike found himself wandering down a small hedge lined track that led to a cemetery. If he was honest, Mike had no idea why he was looking for John's grave. Just more background information perhaps.

The sky was beginning to darken, and he knew that there would not be much time to find it. Mike assumed that the graveyard would not take long to explore but he was wrong. It covered a large area and could have easily taken a couple of hours to examine every grave individually. But he was fortunate. A man laying flowers for some relative, noticed Mike looking lost.

'Can I help you?' The man asked. 'Are you looking for a particular name?'

'Thank you, yes.' Mike replied. I am looking for the grave of John Stewart.'

'Stewpot.' The man looked quizzical. 'Are you a relative of his?'

'Yes.' Mike lied hoping to avoid a lengthy explanation. 'I have just been visiting his dad and I thought I would come and see for myself. 'Did you know him?'

The man smiled to himself at the thought of some distant memory.

'Yes, I knew him. I pinched his girlfriend when we were at school and we had a punch up.'

He looked down at the grave at which he had just laid his flowers and murmured something before returning his attention back to Mike.

'John is over on the far side. I'll take you to him.'

The man led Mike to a part of the cemetery that had become very overgrown. He stopped and pointed to a black stone with white lettering.

'I don't think Mr Stewart has been here for many years. Bit too much for him.'

'I suppose so.' Mike replied. 'So, you were at school together. Was he a friend of yours?'

'No, I wouldn't say that. We had a different circle of friends, but this was a much smaller village back then and I used to see him around.'

'Did you ever see him after he went to university?'

'Couple of times, why?'

'I was just wondering whether he had any friends that I could talk too.'

'Sorry, can't help you there. Although there was a girl I saw with him towards the end, just before the accident.'

'Was there? Do you know who she was?'

'Not really. Her name as Ange, Angela. I think he was quite keen on her. I heard that she was one of the other students involved in the accident.'

'Angela Turner, yes. I don't suppose you heard anything else, possibly about where she might be?'

'No. As I said, we moved in different circles, but if it helps

I vaguely remember that local gossip had it that when she left the hospital she got engaged to one of the doctors. Pierman, Pierson. Something like that...' The man paused momentarily. 'You look as if the name is familiar.'

'The surname is but the woman I know is a Liz Pierson.'

'Now there is a coincidence.'

'Why is that?'

'Well.' The man looked uncertain as to whether to continue for a moment, but then seemed to change his mind. 'Look, I am not sure if this going to help you track down Stewpot's friends. But the first time I saw him and Ange together, they had a bit of an argument. He got cross with her over something and called her Elizabeth. Turned out that was her true first name but she did not like it. So, she used her middle name.'

It was very late in the afternoon when Mike arrived back at the farm. As he expected, the domestic quarters were deserted. Mike put on the kettle to make himself a cup of tea as he began to piece together the day's events. It had certainly been a useful trip. He had verified that the Noril'sk had a definite history of strange activity attached to any physical interference. And that it was unlikely to be directly attributable to its chemical makeup but was somehow a result of impact reactions. Mr Stewart had also said a couple of things that had some resonance with what he had experienced at the farm. He had alluded that not everyone was affected, and that location might also have played a role. So far, no one had managed to explain why people felt a stronger effect in some parts of the farm than in others.

There had also been an interest in suppressing knowledge of what had occurred, if Mr Stewart's views were correct. As he had explained, the 1970s was a highly paranoiac period in history. Flimsy evidence was all too easily exploited for political advantage.

One definite thing to have come from this afternoon's

excursion was the fact that he now had a name that could provide a direct link with what had happened all those years ago. Angela or Elizabeth Pierson, nee Angela Turner. He had arranged for a search of electoral records, but there might be a quicker alternative. As soon as he returned, Mike collected his laptop which was now rolling through its interminable start-up sequence. The tea was simply a filling in exercise whilst he waited for it to struggle into life.

The kettle switched itself off and Mike set about pouring some hot water into a teapot to warm it before adding the tea leaves. He wasn't one for drinking the dust filled contents of a paper bag.

The laptop gave a sharp ping and Mike poured some tea into the mug as he completed a series of password log-in boxes. He was looking for a biography of Liz Pierson and knew that she was sufficiently established to have a number of online references.

Within a couple of moments, he had found her. The picture would have been taken many years ago but was unmistakable. She had an unbroken and impressive CV dating back to 1979 when she had gained her doctorate from, of all places, Southampton University.

'I wouldn't mind one of those.' Said Jan and she gave a slight nod of her head towards his steaming mug.'

'God Jan, you gave me a start. I didn't hear you come in.'

'My, my... we are jumpy. Farm life getting to you, is it?'

'Not exactly,' Mike replied, 'although on reflection, perhaps you are not so wrong.'

He returned to his tea making duties before setting two mugs on the kitchen table. Mike sat down and Jan also sat and waited for him to say something. When she concluded that Mike was not going to volunteer any information, she decided on the direct approach.

'How was your trip?'

Mike mused for a moment, trying to decide how much he was ready to tell her.

'Quite intriguing. Jan, is there any reason why the Noril'sk might only affect people in certain locations?'

'None that I can think of, why?'

'Something that someone said to me. Actually, I could check it now.'

Mike searched for his file on all the locations where they had tested the Noril'sk in the 1970s and which ones had resulted in deaths.

'Here it is. The Soviets sent out one hundred samples. Every single facility that carried out proper tests experienced some kind of problem and that was eighty-nine in all. Interestingly from the ones I know, they are all older structures. Seventeen resulted in deaths. Now looking at the locations of those seventeen there does not seem to be a pattern. Seattle looks like a prefab; Southampton is a 1930s building. Paris looks like an art nouveau design. No, it seems like he was mistaken.'

I am not surprised.' Jan responded. It looks like a pretty tenuous link.'

'I suppose so. Still, it is a little odd because he seemed so certain.' Mike tailed off. 'I have been meaning to ask you a question. But to be honest it's a little embarrassing.'

'I would have thought we had gone beyond that.'

Mike felt curiously pleased with her last remark.

'When I first came here, I thought that one of you was playing a practical joke. You know the painting in my room?'

'The one you took down.'

'That's right. I took an instant dislike to that portrait. There was something very disturbing about it.'

'I know what you mean, those eyes and the expression. I never liked it either.'

'Quite so. Anyway, on my first night here I turned the picture around. But every time I did, someone would turn it back again.'

'The cleaners I expect.'

'No, wrong time of day. In any case, I got so fed up with it, I took it down and locked it in my wardrobe. However, on two

occasions I hallucinated that the picture had returned to its original position above the fireplace. Both times followed a substantial test of the Noril'sk.'

For a moment, Jan looked like she would become angry, but then seemed to change her mind.

'It would have been nice if you had said something earlier.'

'Yes, I know.' Mike replied. 'I am sorry.'

Jan smiled faintly. I wouldn't worry about it. We know that the Noril'sk emits some kind of force which acts on the brain. Still, it must have been quite unsettling.'

'That is an understatement.' Mike replied. 'The thing is, is this an effect which is entirely in my own mind or is a more substantial consequence of the radiation emanating from the Noril'sk?'

'You mean in the same way that I saw the ghost of Lizzie Striker but no one else could, whilst we all saw the extra shadow?'

'Exactly.' Mike replied. 'It does bring us back to the fundamental question of whether the Noril'sk is simply causing us to hallucinate or whether it is somehow making us sensitive to some other kind of reality. I have a feeling we are missing something fairly fundamental.'

Jan smiled. 'You are referring to what Mary Ellis said about Peter and John using the word Noril'sk.'

'You have to admit, that is pretty weird.'

'So, you need to know whether I see the painting in the same way that you do.'

'That's about the size of it.'

Jan looked puzzled. 'I don't see how you could see this as embarrassing. We have discussed this before. In fact, that is why we went to see Uncle Roger.'

'Ah well, I have yet to get to that bit. Now please do not misunderstand my intentions and you must feel entirely free to decline...'

Jan's smile became broader.

You want me to spend the night with you the next time we

test the Norilsk.'

'Well, I would not have put it quite that way, but yes.'

You do realise that if I do, it will keep the others fully occupied in gossip for weeks.'

'Yes, I know and I would quite understand if you said no.' She paused for a moment.

'Mike, we are both adults and so the answer is yes. Strictly in the cause of science of course.'

Mike knocked at the door to Liz's office and heard a muffled voice which could have said 'go away', but he took as an invitation to enter. Inside he found Bob and Liz, both of whom wore expressions of guilt.

'It's not very convenient.' Liz complained but then made the mistake of asking Mike what he wanted.

'I am glad I have caught you both together and it should not take too long.'

Liz flashed Bob a quick look of exasperation and then clumsily hid some papers they had evidently been discussing.

'Very well, but please make it quick.'

'I am going to make a guess that you have just been discussing the Noril'sk.'

Two faces noticeably reddened but neither said a word.

'I am also going to make a guess that you have been discussing why ASRI HQ, all of a sudden, seems to have changed its corporate mind about the Noril'sk programme and how to continue with the experiments against their instructions.'

Mike carefully watched their reactions. Liz's face remained impassive but Bob's betrayed clear alarm. It was time to go in for the kill.

'Very well, I am also going to guess that the results of your experiments yesterday showed that the Noril'sk sample increased in size and weight and also showed a proportionate increase in its effect. In addition, when you measured it again this morning, it had contracted. Possibly back to its original size.'

Where the hell did you get that information. Only Liz and I

know the results.'

'Because I am a journalist, Bob. I do my homework which is more than I can say for either of you.'

'And what do you mean by that?' Bob replied beginning to show signs of a temper.

'I mean that you both should have been asking a lot more questions. Didn't it occur to you that ASRI made their decision for a reason? You know nothing of the potential long term effects of your experiments. You are working in the dark with an unknown substance and yet you have failed to take even basic common sense precautions.'

Bob looked as if he was about to argue the point but then seemed to change his mind.

'Yes, you are right. In fact, that was something that we were discussing.'

'Yet you propose to continue.'

'No one else will be involved and any risks we take is our business.'

'With respect Bob, you are talking bollocks. You already know that the Noril'sk is radiating something that can penetrate through several metres of earth and god knows what else you have got shielding your nuclear power source.'

'You're fishing.' Said Liz.

Mike smiled a guilty smile. I will give you that one. Nevertheless, the point stands.'

'The experiments will be controlled. Besides which, may I ask, what it has to do with you? You are here by invitation to cover basic ASRI work. That invitation could be withdrawn.'

'I would suggest you do not try to pursue that line of thought.' Mike replied. 'Why don't you ask your colleague.'

Bob looked at Liz who gave a slight shake of her head.

I have been asking the questions that you should have been asking and what I found out scares me. To be frank, it scares me a lot.'

'Then why don't you just leave?' Mike ignored Bob's remark.

'Tell you what. Why don't you ask her another question? Why don't you ask her about why she was so vehemently against even having the Noril'sk sample on the premises and yet now she wants to press ahead in secret, despite direct orders.'

'I simply happen to see value in his work.' Liz replied, but in such an insincere tone that it was obvious even to Bob.

'We both know that is not true, don't we, Angela Turner.'

Liz looked shocked. Her face drained of colour and she remained motionless and unresponsive for several seconds.

'How did you know?' She whispered when she was able to regain some composure.

'As I said, I do my homework. Now would you like to explain to Bob your particular interest or shall I.'

'Please be my guest as you seemed to be so well informed.'

'Very well.' Mike began, a little disappointed by Liz's reaction. 'In 1973, the Soviet Council sent samples of the Noril'sk to one hundred selected universities as part of a scientific rapprochement programme. Liz was a postgraduate student at Southampton University working towards her doctorate. There were two others. Another student called John Stewart and their tutor, Phil Meredith. Phil and John had been working on an idea that life could have come from space carried by meteorites composed of complex chemicals. They were further contending that these complex chemicals could have formed as a result of collisions. These days, all of this seems fairly uncontentious, but back then the idea was pretty revolutionary. They were using very primitive equipment but nevertheless managed to create the same undesirable side effects that you have been experiencing. We all know what followed. But what you will not know is that as a result Meredith suffered a fatal heart attack and the two students ended up having a mental breakdown.'

For a few moments, the room went quiet. Then Bob turned to Liz and spoke in a barely audible voice.

'Is this true?'

Liz nodded.

'All those claims about supporting my work were nothing more than lies?'

Again, Liz nodded.

'Liz, I think I deserve a proper answer.'

Liz sat back in her chair with an air of resignation. 'Yes, it is true and yes, I have not been honest with you. When I first learned about what was coming here, I was horrified. You cannot imagine the terror of those eighteen months I spent in hospital. The constant nightmares, the ever-present sense of fear. It was like being in Hades from which I was only able to slowly to emerge. When I realised that you had brought that thing back into my life, everything I had built to escape that memory seemed to be under threat. Then later I began to think about what an opportunity it was to discover what had happened. Why Phil, John and so many others perished and whether they had the same overpowering feeling as I did during that final experiment.'

'Feeling of what?' Bob asked.

'There was something alive, something malignant.'

'That was the reason for your speculations,' Bob replied with a hint of bitterness, 'nothing to do with science.'

'Of course it has to do with science.' Liz reacted angrily. What else could it be?'

Mike became concerned that the conversation was running away from his purpose and he needed to be sure of their intentions before he left.

'Given that you both now acknowledge the reality of the dangers, can I take it that you will drop any plans to resume the experiments and will comply with ASRI's instructions. Or at least until some basic safeguards can be put in place.'

You can take it that as the director of this facility, I have issued instructions and expect my people to comply with them.' Liz responded tartly.

Mike looked at them both and realised that that was as much compromise as he was going to get. As he turned to leave, Liz

called out after him.

'Mike, what exactly is your connection with ASRI?'

Mike looked puzzled at first but then realised the point behind her question.

'I am simply here to observe as you know.'

Mike once more sat in the bar of the Oak, savouring a pint of Badger. In the few short weeks, since arriving at the farm, he had become a regular and could easily predict when the pub would be busy and when it would be quiet. For today's purpose, he required a little peace to talk with Jan and had chosen Monday lunchtime when he knew the local farmers would be at market.

He looked at his watch. Jan was not exactly late but he hoped that she would arrive before they stopped serving lunch. It seemed rude to just order for himself. As if on cue, Jan walked in and smiled as she spotted him. This was not hard as he was the only person in the bar.

'Hello Jan. What would you like to drink?' Mike smiled warmly as he was genuinely pleased to see her away from the others.

'A dry white wine please and are they still doing food? I'm starving.'

'Just. Have a look through the menu while I try and raise Harry.

A short while later they both sat down at a semi secluded table by a large stone fireplace. Mike noted that Jan had chosen to sit next to him instead of on the opposite side of the table. He also noticed that she had made some effort to look presentable even though they were simply out for a Monday lunchtime drink. He suddenly felt very self-conscious about his faded jeans and baggy beige jumper.

'How was your morning?' Mike asked in a ham-fisted attempt at small talk.

Jan was having none of it.

You did not ask me here for a friendly chat, so why don't you come to the point.' She smiled to let him know that she was not annoyed.

'Yes, of course. But I am actually interested in the answer. It would be useful to know whether you are in a good mood.'

'Oh dear,' Jan replied, 'that sounds like a prelude to something that I am not going to like. However, I had an OK morning, neither good nor bad.'

'Anything out of the ordinary happen?' Mike pressed.

Jan raised her eyebrows in surprise.

'This conversation is beginning to take a bizarre turn, but if you must know, yes.'

'You had a memo from Liz ending all experimentation with the Noril'sk.'

'Now you are spooking me. You could not possibly have seen it as it was shared via the secure drive.'

'I will just say that I had privileged information. Do you believe it?'

'Should I not?'

'Well, you have known everyone for far longer than I.'

'If the instruction had come a week or so ago, I would not have been surprised. You saw her reaction when she found out about Bob's intentions. But recently she seemed to become quite enthused. What did surprise me was the lack of reaction from Bob.'

'Given what happened last time.'

'Exactly. Look, what is this about?'

Mike did not answer immediately. He liked Jan. He liked her a lot and for that reason, he was reluctant to get her involved with his machinations. But he had asked her here to do just that. Mike took a deep breath to mentally prepare.

'Could you write a programme to monitor for Noril'sk radiation...without the others knowing about it?'

'Why would I want to do that?'

Because I have good reason to suspect that Liz and Bob

fully intend to continue with their experiments.'

'I cannot say that it would be a surprise, but if they wish to do so, what is the problem?' Jan's tone sounded a little too innocent.

'I think you know what the problem is?'

'OK, that was a silly thing to say. What I should have said is what business is it of yours. Look. I do not wish to be rude but you are here as a guest to write some PR for CERN. You don't even work for ASRI.'

'Actually, that is not quite true.'

Mike paused. He was not sure how she would react if he told her the truth. In fact, she might not take kindly to it at all. But the reality was that he needed her help and therefore she deserved to know.

'It is absolutely true that I am here to write a series of articles about CERN and the re-launch of its collider. But that is not the only reason. I cannot go into details, but I am also here at the behest of ASRI. All right, let me tell you the full story as far as I can. You will know of Johann Svensson.'

'The chief scientific advisor.' Jan responded with surprise.

'Precisely, he is a personal friend and he is also in deep trouble. As you know, ASRI nearly went to the wall over the Cadlington scandal. Johann kept his job and his reputation by the skin of his teeth. But the problems did not stop there. The farm is haemorrhaging secrets at a rate which, again, is threatening the company's existence. Johann is responsible for all senior scientific appointments and his neck is on the line. It was he who suggested to CERN that the farm would be a good place for me to visit.'

'Does Liz know about this?'

'In part yes, we have been working together to try and trace the source of the leaks. However, as inconvenient as that may be to the ASRI balance sheets, I suspect that the Noril'sk could be a far more significant threat.'

'Because of the health risks.'

Mike smiled. You make it sound like a concern for the local

GP. I suspect that the risks could be, and I emphasise could be, far more significant.'

Jan looked contemplatively at Mike for quite a while before speaking.

'It might be possible to write some spyware, but it would be helpful to know what it is supposed to look for?'

'Any signs of the accelerator being used outside of normal working hours?'

Jan smiled. 'I don't think you would need spyware for that. You can feel the vibrations through the whole house.'

Mike looked baffled. 'Yes, you are right. Why did I not think of that?'

'Probably because our rooms are on the far side.'

'In which case,' Mike continued, 'I wonder how they intend to do it.'

'Do what?' Jan enquired.

'Carry on with the experimentations with the Noril'sk.'

'Always supposing that they are.'

At that moment Harry appeared behind the bar and noticed the menus on the table.

'We've run out of game pie but the steak and kidney is good even though I say so myself.'

Mike looked at Jan who nodded. Taking that as two orders, Harry disappeared leaving Mike and Jan alone once more to contemplate their problem.

'If I wanted to use the accelerator for clandestine experiments, I would not try to hide the fact that I was using it.' Said Jan.

Mike looked puzzled.

'Everything connected with using the accelerator is carefully monitored. Most of the sensors have finite lives and so there are stringent control systems in place to ensure that it is operating at the peak of efficiency, not to mention the safety protocols. Even the backup systems are continuously monitored.'

'Your point being?'

'Well, we can't all be geniuses.' Jan replied with a wry smile. 'The point being that if I wanted to use it for my own purposes, I would do so when it was being used for something else. I would simply set the computers to monitor for a different set of results.'

'That is sneaky.' Mike replied admiringly. 'You mean it would be simpler to substitute the Noril'sk for other material that was being tested.'

'Exactly, but we know that it has side effects.'

'Which annoyingly brings us back to our original problem. How will they continue the tests on the Noril'sk and how do we keep tabs on them?'

Jan took a sip of her wine before replying.

'Again, there could be a simple answer. This is not the only facility ASRI has. There are another three. One in Poland, one in Brazil and one in Pakistan.'

'Really.' Mike replied with overtones of sarcasm.

'Oh yes, I was forgetting your close connections. In that case, you can work it out for yourself.'

Mike thought for a moment and then gave up.

'Then shut up and learn. It would of course, require ASRI top brass support, but it would be possible to use our control centre to operate any one of the other facilities. Meaning that Liz or Bob could carry on without any chance of us suffering from those side effects. If they were to do that, my guess is that they would use Poznan. That one has been mothballed, in theory.'

'In other words, we are back to the idea of a spyware programme that could record any details.'

'I suppose so,' Jan replied, 'and yes it would be possible to write a monitoring programme.'

'Then I think it had better be tonight. If I read those two correctly, they will not waste any time.

'Which brings me to one obvious question,' Jan added, 'why would ASRI issue instructions to end the Noril'sk experiments and then make it possible for them to continue.'

Mike smiled smugly. 'My dear naive girl, it is all a question of accountability. Someone has realised both the potential and risks of this stuff even if Liz and Bob have not. I have a strong feeling that those two do not understand what they are getting into.'

'Well, I suppose you should know, being our resident master spy.'

At that point, there was an awkward silence. Jan again sipped her wine as she contemplated Mike's expression. Mike stared into his beer, conscious that he was under scrutiny.

I think you have something else to say.' Jan said quietly.

Mike took a deep breath. He was not looking forward to this. 'Yes, I do. I will be leaving the day after tomorrow.'

'So soon,' Jan replied, 'but you will keep in touch?'

Mike leaned back in his chair. Somehow, he had been under the impression that they were moving beyond a simple work related acquaintance. But from Jan's matter-of-fact reaction, it was clear that his assumption had been wrong.

'I expect so.' He replied in deliberately measured tones.

'And it's not as if we live in the 18th century. There are phones and the internet.'

'Yes, of course.'

Jan's eyes carried an unmistakable searching look. Mike had to think quickly before the situation had a chance to become embarrassing.

'It's just I am concerned about you.'

'How nice.' Jan replied quietly.

At that moment, Harry reappeared with their lunch.

Jan returned to the control room with a hot cup of strong coffee which she set down on the desk. It was going to be another long night. Following her lunchtime discussion with Mike, she had checked the schedules and realised that the console room was not being used until the 3.00am routine

systems check on the accelerator. This gave her the perfect opportunity to slip a new programme into the server. She had decided that the best way to give Mike what he wanted was not to try to create a monitoring system, which might be detected but to create an intercept address which would store the results if and when someone tried to save or send them. That way it would not matter which facility was used, provided that it was controlled from here.

Creating the address was simple. The complex part was accessing the server protocols without leaving any signs of tampering. But, then again, she was a computer expert. Jan sipped her coffee and had just started work when she heard the door being quietly opened. Carefully controlling her actions so as not to cause suspicion, she turned slowly around to be confronted by the figure of Mike.

'Jesus!' She exclaimed. 'What are you doing here?'

'Curiosity.' Mike replied.

'Killed the cat and very nearly did for me. Curious about what?'

'How you are going to hack into the system.'

'And you understand code.'

'Not in the least.'

'Then shut up and let me get on with it.'

Mike grinned as he watched her focus on the screen. Her fingers became a blur of activity as she simultaneously read, deleted and rewrote in an obscure cypher. She seemed to become oblivious to her surroundings, melding into the virtual world of 'x's, dashes and nonsensical words. Every now and then she would pause, either to take a sip of coffee or brush her red hair from her face.

Mike contented himself to sit quietly and watch as the hands of the clock wound themselves fully round the dial almost three times.

He was not quite sure when she stopped. He just became slowly aware that she had. When the action, or rather a lack of it did make itself known to his conscious mind, he saw that she

was staring uncomprehendingly at the screen.

'What is wrong?' He asked.

For a while, she did not reply or indeed show any signs that she registered his presence. Then Jan seemed to emerge back into the real world.

'Sorry, what did you say?' She asked blankly.

'I asked you what was wrong.'

'I'm not sure.' Jan replied. 'But I think someone has been here before us.'

'What do mean?' Mike asked, his journalistic curiosity taking full reign.

'Just what I say, someone has already infiltrated the system in the way that I was going to.'

'What exactly were you going to do?'

"To put it simply, I think I have found your spy for you. Every time, the director sent our results to ASRI, it was actually sent to an intercept address. And because it routed the information on to the final recipient, no one would know that it had been intercepted."

'That's very clever.'

'I know it is. I thought of it. The question is, who else did?'

'Good point.' Mike stopped to think for a moment. It was quite possible that he could deal with two problems at the same time. 'Could you redirect the results?'

'I could.' Jan replied.

'But I also want to feed in false results.'

'To discredit or mislead.'

'Neither. I want to identify who the recipient is.'

'Nothing could be simpler. Jan replied. 'I'll create a tracker.' Mike looked blank.

'It's a small piece of code that retraces a journey. When it finds the original transmitter, it returns the IP address.'

'Then all we need to do is trace the physical address.'

'In theory but you might not find that so easy.'

Mike smiled mischievously. 'Perhaps not for us mere mortals.'

'Oh yes, I was forgetting I was in the presence of a master spy. Now, please go away and leave me in peace to get on with it.'

It was about half an hour later that Mike heard a soft knock at his bedroom door. He glanced at the mantelpiece clock, which told him that it was half past two. He got up from the bed, put on a dressing gown before opening the door to find Jan. She was clutching a small bag and was also wearing a dressing gown but hers was of a distinctly flimsy material.

'Good god Jan, what are you doing here?'

'Thank you for that welcome. You invited me, remember.'

Mike could think of nothing to say for a moment. Stunned by both her unexpected presence and this new image of Jan as a sexually attractive woman.

'Are you going to invite me in?'

'Yes, sorry.' Mike stumbled over his reply. He fully opened the door and then closed it behind her. 'Look, if I appear baffled it's because I am. I thought that you staying the night to verify the ghostly portrait had become superfluous.'

'What makes you think I am here to look for ghosts? Can't you think of another reason?'

Mike's jaw dropped with an almost audible clunk.

Jan smiled mischievously. 'Actually, I am here because of our discussion about the portrait. You were right. Our not so up-right directors are planning to highjack the routine maintenance schedule tonight in order to carry out some further tests of the Noril'sk, but they will take place here.'

'Is that so?' Mike replied. 'How on earth do they think they can manage to keep that under wraps?'

'Oh, I don't think they intend to carry out anything elaborate, more likely some low-level verification tests. I noticed that the system had been set to measure certain types of radiation rather than the usual benchmarks used for simple

calibration checks.'

'The cheeky buggers.'

'I assume that they are banking on the levels being too low to stimulate any kind of reaction. Particularly as we all seem to have built up a degree of immunity. However, you never know, hence the reason why I am here. So, am I staying?'

'Yes... of course.'

'Well, you could sound a little more convincing.'

'Sorry. It's just, well, been a little unexpected. You can have the bed. I will sleep on the armchair.'

'Come on Mike, we are both adults and that thing looks distinctly uncomfortable.'

Mike looked at the chair and had to agree.

There are some fresh towels in the cupboard underneath the sink.' Mike said as Jan disappeared into the bathroom.

'Yes, I know.' Came back the disembodied replied. 'Why don't you pour us both a whisky, I think you need one.'

Mike thought that was a very good idea and poured himself an extra-large one.

'Actually, I am not at all sure that I should not be feeling insulted.'

'Sorry, I didn't catch that.' Mike raised his voice.

'I said...' Jan continued as she re-entered the bedroom. 'Never mind. What's in that dusty old box?'

Mike was puzzled for a moment until he noticed the red box file box sitting on the end of the bed.

'Just some papers but there is something else which might interest you.'

He opened the box and took out a large pack of tissues which he carefully unwrapped. Inside was a small black object.

'What is it?' Jan asked as Mike carefully placed the object in the palm of her hand.

'That, my dear girl, is a tiny fragment of the Noril'sk meteorite.'

Jan's mouth opened wide. 'Where ever did you get it? I thought that only Bob and Brendon have access.'

'John Stewart's father. Here! Use this to have a better look.' He handed Jan a large magnifying glass. 'It's quite difficult to see it properly because the fragment is so small, but you can just about see all the colours shot through it.'

'I can.' Jan handed it back. 'Are you sure you should keep it here?'

'I think it's quite safe. The old boy kept it in his shed for forty years.'

Mike was just about to re-wrap the fragment when Jan asked for it back and took it over to the small bedside lamp to get a better look.

'I have never seen the Noril'sk,' Jan began, 'but I am familiar with its chemical structure. I am also familiar with how a normal iron meteorite feels. This is a fake.'

'Is it,' replied Mike in surprise, 'are you sure?'

'Not for certain, but I would be willing to take a bet.'

'How very strange.' Mike replied as he placed it back in its box.

'Oh lore! I just thought of something.'

'What.'

'I don't normally wear anything in bed and as I was not expecting you, I did not buy anything.

'That's' OK.' Jan replied. 'I don't wear anything either.'

Jan lay still in the darkness. After two years of living in the depths of the countryside, she had become used to the enveloping blackness of night. There were no streetlights or other houses casting light to drive the dark into the furthest corners of the house. Stripped of sight and sound, it became difficult to distinguish between being asleep and awake. The mind could only slowly recognise the emerging sensations of touch and smell.

Jan stared into nothing until the first sensation made itself known and it was not a welcome one. Her body seemed to be

wrapped inside something that was coarse and unpleasant. She could feel a heavy weave pressing into her skin and there was a smell, a cloying odour of damp. She then became aware that the whole feel of the bed was wrong. It should have been soft but firm. Instead, it was hard and unforgiving, filled with a thousand little bumps. The final sensation consisted of a stronger and more evocative scent. The smell of unwashed flesh mixed with wood smoke, rotten fish and something else, another scent. No, not a scent, for that was too delicate a word. It was a pungent odour of something false. A crude pervasive smell that seemed intent on smothering the other odours, but which was miserably failing to do the job. She breathed deep and almost gagged on the stale concoction.

Something was clearly wrong. Slowly Jan turned over and reached out expecting to find Mike. Her hand met nothing. A brief moment of panic set in before her rational side began to reason his absence, a trip to the bathroom or the kitchen. Perhaps embarrassment had driven him to find another room to sleep. She turned back and extended her hand towards where she expected to find a bedside table and the comfort of a lamp. Her fingers gingerly explored the area until they encountered a hard surface. But once more the sensation was not as it should be. She expected to feel a smooth shiny material on which sat a small clock, but she found a rough wooden object and a strangely shaped cold metallic dish.

Jan's next sensation was simple to comprehend, sheer cold fear. Her fingers jabbed around the rough wooden object until they hit something. Then she heard a loud clatter as the something struck the floor. Jan sat bolt upright. She took a couple of deep breaths as she prepared to explore her surroundings that seemed to confound all reason.

'Come on girl.'

Jan said to herself in a quiet but firm voice, trying to build within, a sense of courage that she did not feel. Slowly Jan lowered a foot to the ground. It encountered hard wood instead of plush carpet. After taking stock of yet another

unexpected surface, she lowered the second foot and stood upright, but clung to the bed.

If things were as they should be, then the window would be no more than three strides away behind a desk. Trying to mentally steady her nerves, she took a bold step into the black void. Then she took another step followed by another. Jan stopped and stretched out her hand but found nothing. This time the sense of panic was almost overwhelming. She briefly imagined herself standing on the edge of a precipice. One more step could send her hurtling down into the inky blackness of this strange and terrifying world. Carefully she edged her foot out once more, feeling her way along the rough wooden floor. Thankfully it remained solid and she then brought her other foot parallel to the first and completed a fourth step, which was followed by a fifth. Once more Jan tentatively stretched out her hand and this time it came into contact with something hard and flat. Not glass but something nevertheless. She moved her fingers over it, trying to work out what it was. It had the feel of something familiar. Something she had seen recently. Then she found an edge. She followed it for a moment until a raised cold object struck the side of her hand. This was something definitely familiar. Jan closed her fingers around the object and pulled. Immediately the room filled with a cold pale white-blue light and she saw the moon shining high above.

It was only a small light but it was enough. Jan could now see the knob of the other shutter and pulled it wide open allowing a little more illumination to enter the room. Then she turned around.

The bed was there, just as it should be. There also was the large dark wooden wardrobe sitting against the opposite wall next to the door. The fireplace was also there, but nothing else looked familiar. It was then that Jan saw the object she had knocked to the floor, almost hidden in the shadows. It was a candle holder complete with half burned stub. On the table was a jug filled with long pale tapers. Jan picked up both and made her way towards the fireplace, which had the remnants of an

orange glow deep within its depths. Once there, she took a poker and began to dig around until a small flame was fully revealed. Jan pushed the taper into the heart of it and a moment later it began to burn. She then lit the candle, which spluttered into life and immediately gave off the smell of fish. A vague memory stirred about candles once having been made from fish oil.

Now that she had light, Jan felt confident enough to have a proper look around. Almost everything had changed. The floral wallpaper had been replaced by dark wooden panelling. Gone also was the carpet and the desk that should have been in front of the window. The ceiling, which had been flat, was now covered by ornate plasterwork, but the most striking change was the absence of the door that led to the bathroom. Jan did not know what to do. She knew that she was not dreaming. This reality was simply too full of physical sensations to be the conjured image of a dream. She must be having an illusion. Clearly, the radiation from the Noril'sk was powerful enough to affect her sense of judgement. But it all seemed so real.

Emboldened by the candle, Jan decided to explore this new world. It would be interesting to see afterwards how accurate her illusion was. Jan made her way towards where she expected to find a chair with her dressing gown laid across it. A fleeting memory of Mike came back and she smiled. Was he still lying in bed, but she could not see him? Jan thought about calling out but something stopped her. The chair was also absent and so Jan made her way to the wardrobe and opened the door. It was filled with what looked like folded cloth. Jan pulled one out to reveal something similar to a blanket which she wrapped around herself. It was heavy and coarse and difficult to hold. Then she noticed another piece of cloth, which once unfolded, revealed itself to be a loose fitting coat. Dropping the blanket to the floor, she put on the coat and fastened the large wooden toggles to a series of looped ropes. It stank.

The next object for Jan's attention was the door that led to

the rest of the house. This was to be her biggest challenge as she had no idea what lay beyond.

Mike woke with a start and instantly knew that something was not right. He turned his head to face Jan, but she was not there. He called out just in case she had gone to the bathroom, but he knew that she had not. There was no tell-tale light creeping under the connecting door. He reached over and switched on the table lamp and immediately had to shield his eyes from the glare. It took a moment to become accustomed to the light before he got out of bed and pulled on his dressing gown that lay alongside Jan's. Now he was worried. She might have left the room for some reason, but she would hardly have left naked.

Mike opened the door to the hallway and made his way towards Jan's room at the far end. When he reached her door he gently knocked. There was no reply, so he opened it. The room lay in complete darkness. He felt around the edge of the doorframe, searching for the light switch and with a click, the hidden features revealed themselves. The room was obviously empty, but Mike went inside to look around anyway. The bed, of course, had not been slept in. A large pile of clothes smothered an armchair and the bathroom door stood ajar confirming that Jan was not there either. Where on earth could she be? Mike thought.

'Kitchen.' He said aloud taking himself by surprise.

Mike made his way back into the hallway and walked quietly along its full length. He did not yet want to disturb the others. Not if Jan simply wanted a glass of water or something. Then an embarrassing thought occurred. He was behaving as if they were a couple. If she wanted to leave his bedroom, for whatever reason, she was free to do so without him assuming the worse. He stopped for a moment outside his own door, wondering whether to go in and stop being so concerned. Then

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he remembered the dressing gown. As he approached the stairs an automatic night light came on illuminating the way to the lower hallway. Once there, Mike felt safe to switch on the light without the possibility of troubling the others. The kitchen lay at the far end of the narrow hallway. He listened carefully as he approached the door for any sounds that betrayed her presence. As Mike opened the door, his heart sank. The kitchen was also dark.

Mike almost ran between the remaining rooms. He checked the lounge and library and then went down into the basement. Everywhere was in darkness. Finally, he decided to check the front and back doors. Both were secured from the inside. There was nothing else to do, he would have to wake the others.

Jan's fingers closed around the doorknob and she listened. All seemed quiet. Counting mentally to herself, she pulled as her thought-counting reached zero and found that the corridor was not hidden in darkness as she had expected. From somewhere unseen, a yellow flickering light created little dancing patterns that flitted wildly around the walls. Jan took a few small steps towards where she expected to find the main staircase. Unlike the bedroom, the corridor seemed to have hardly changed. High walls bounded a narrow space between the bedrooms. In the remnants of light, Jan could see the familiar pale coloured ceiling and dark oak floor. The light seemed to be coming from the far end and she slowly made her way towards it. A moment or so later and she came face to face with the source. A heavy metal bracket secured to the wall that held a large burning candle.

The stairs were where they should be but the rail, which was normally black and shiny, was now the rough colour of bare oak. As she turned to face the stairwell, Jan became aware of a crowd of pictures. Each one featured people dressed in the

same period clothes as the portrait of Rupert. But there was something strange. Unlike the rest of her illusion, these had an unreal quality about them. The harder she tried to focus on the faces, the more unclear they became. Perhaps this was just a dream. Nevertheless, Jan was determined to explore the rest of the house. The stairs made no sound as she descended even though she could feel the wood moving underneath her feet.

The hall in which she found herself was quite different from the space that she knew so well. Jan expected to find another narrow corridor leading to the domestic quarters. Instead, she was in a large wood panelled room that seemed to stretch from one side of the house to the other. There were no pictures here, just plain oak panels. Such was the difference that Jan found herself doubting her knowledge of the layout of a building that had been her home for over two years. She paused, confused as to where to go next. It was then that she noticed that one of the panels was set a little further back than the rest.

Pushing at it quietly, Jan found that it was in fact, a door that opened into a large ornate room lit only by moonlight and a dying fire in the grate. Shadows moved chaotically around driven by the spluttering light of her candle. She could make out a tall latticed pained window, an ornately carved stone fireplace set in a heavily carved panelled wall and a variety of half hidden tables, chairs and other furniture. There were a number of paintings on the wall. Some were portraits whilst others appeared to be biblically inspired landscapes.

The house clearly belonged to someone who had money, but she was no nearer to finding out who it was and more importantly, why she was having this illusion. Jan left the room to search the rest of the house.

Once back in the hall she began to look for a common frame of reference with the house that she knew. Something that might explain what was happening. A brief search and she found what she was looking for. Another indented panel, but altogether plainer, which she recognised from its position, would lead to the basement. Jan could not help smiling faintly

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to herself as she opened the door. How many times had she laughed at some poorly scripted film or tv character as he or she naively stepped into somewhere better left alone. Nevertheless, for some reason, whether or not this was a simple illusion, Jan felt drawn to the complex of interconnecting basement rooms.

As the light from her candle revealed the space beyond the door, she could see that it had barely changed. The same off-white, slightly peeling walls. The same stone staircase but the wooden bannister rail was missing. However, as she descended the steps, the similarities stopped abruptly.

The familiar white shiny partition walls dividing the space into a series of rooms, were not there. Instead, she saw a large brick and stone walled space that stank of rot and decay.

Jan stopped at the bottom of the stairs and questioned the sanity of going any further. She had almost decided to return to the hall when she heard a faint sound of movement. It was odd. Not since she had woken in this strange place had she questioned the fact that she was entirely alone. Jan looked down at her candle holder. It was heavy and quite large and could make a handy weapon if needed. She would go on.

This cellar was filled with rows of rough wooden shelves full of bottles and small kegs. About halfway across the cellar was an iron fence, which stretched across the full width of the room and in the middle, was an open gate. But it was what lay beyond the fence that caught Jan's eye. There was a faint glow of light. She quietly crept forward, ready to make use of the shelves as an impromptu hiding place if required. In her world, the second cellar was used as storage and the third lay empty. Rumours had it that the builders had refused to work in there. She and Claire had visited it a couple of times and it did have an unpleasant atmosphere.

Jan had reached the halfway point across the first cellar when her candle made a violent fizzing noise and dimmed momentarily. It had done so several times since she first lit it, but not like this. Once more Jan experienced a sense of panic.

The last thing she wanted was to be left without light in this awful place. She stared at it for a moment before deciding to go on. As Jan passed through the gate, she became aware of a large number of wooden crates stacked almost to the ceiling. They seemed to form a narrow corridor that led to a blank wall. This was not right. There should be a door leading to the third cellar but as she moved closer, her candle clearly showed that there was nothing but a wet stone wall.

Suddenly she was in total darkness. Her heart began to beat wildly, pounding in her ears. Every sense was calling for her to scream but Jan instinctively knew the folly of such an act. She forced herself to breathe deeply to slow her racing heart.

As her eyes became accustomed to the blackness, they detected the merest glimmer of light coming from a half-way point in the room. Jan edged towards it. Fingers gingerly walked along the edge of a row of packing cases until she reached a gap. The light seemed to be coming from her left. This was puzzling as there was nowhere for it to come from, at least not in her world. As she rounded the corner edge of the cases however, Jan saw a door and beyond that, lay the source of the light. There was another quiet sound. She stood still for a moment, fearful that if she could hear it, then whoever was making the sound, might also be able to hear her. If she still had her candle, she would certainly have made her way back to the hall. But she did not. Jan had no choice but to go on. In truth, she also wanted to go on, sensing that somewhere beyond the door lay the answer to why she was experiencing what now seemed less and less like a simple hallucination.

On the other side of the doorway, there was a narrow passage and another stone wall. As she approached Jan could see that it led to the left and at its furthest end was another door which was three quarters closed. This was the source of the light. Jan moved quietly towards it. The closer she came to the door, the more she could see of the room beyond, but nothing could have prepared her for the scene that gradually revealed itself.

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Somehow a sixth sense was preparing her for the worst. Her heart began to pound once more, threatening to obscure sight and sound. Jan felt that she had to keep it under control just in case. In case she needed to run. Softly she took hold of the door handle to prevent any tell-tale movement and then she looked.

Mike knocked loudly on Brendon's door, as he occupied the room next Jan. He waited for a moment before knocking again. The door slowly opened to reveal a bleary-eyed Brendon.

'What's wrong?' He murmured in an uncomprehending way. 'Why are you waking me up at this hour. For that matter, what hour is it?' He looked at his watch. 'Do you know that its half past four. What's wrong with you?'

Mike had no patience for lengthy explanations. Jan could be lying injured somewhere.

'Get yourself decent and help me to look for Jan. She has disappeared.'

'I don't understand. What do you mean?'

'Yes, I would like an answer to that as well.'

Mike looked around to find Bob and Claire behind him.

'I mean that I can't find her. What else should I mean?'

'Have you checked her room? Asked Brendon.

'Of course I've bloody checked her room.'

'OK, I only asked.'

Mike realised that he had overstepped the mark. Losing his temper was not going to help Jan. 'No, it's me that should be sorry. Look! Jan and I spent the night together. I woke up a short while ago and she was gone. I have checked all the rooms and the outside doors are locked, so she must be somewhere in the basement, but I can't find her because the lighting is in night mode and I don't know how to turn it on.'

'In which case,' said Bob, T'll get some torches and we will all go and look.'

A few moments later everyone assembled in the control room including Liz. Each took a torch and they divided themselves into groups to search the three cellar rooms.

Liz began with the main cellar, unlocking the partitioned rooms one by one, checking to see whether Jan was there or not. Mike and Brendon searched the second. As this was used for storage, there were many rows of shelves and stacked packing cases behind which Jan could be lying unconscious. They moved along the gangways looking for any half hidden crevice that could hide a fully grown woman.

Bob and Claire had elected to check the rest of the house that Mike had missed including the attic. Just in case. Eventually, they all met at the entrance to the third cellar. Mike knew only too well from personal experience, that this final area housed a labyrinth of rooms most of which had no lighting. He called out in the vain hope of hearing something. Nothing. He called once more but even louder. Again, there was no reply. There was nothing for it but to search them all one by one.

Jan peered into the room and saw a figure. Black against the flickering torchlight, it was not a large figure, yet it emanated a sense of menace beyond its stature. Jan's 21st century scientific mind struggled with the concept, but there was no doubt in her feelings. This figure embodied evil. It had its back to her and seemed to be shaking very slightly as it looked down on something. What it was, Jan could not see. Then the figure made a sound. An inhuman sound, soft, barely audible, but filled with malevolence. Jan began to experience a desperate desire to see what lay beyond, but she dared not move from her hiding place. Then the figure moved. Now she could see, plainly see what the figure had been looking at. It was Lizzy Striker. There could be no mistake. It was the same pathetic form she had seen outside of the control room. But this time it

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made no movement. Jan had never seen a dead body, but she knew that this slight, blood stained shape would move no more. It hung from its two emaciated and manacled wrists in a sickeningly distorted way. Jan involuntarily took in a sharp intake of breath. The figure froze and began to turn slowly. Jan felt rooted to the spot. Every sense, every fibre of her being was screaming for her to run, but she could not. As the figure turned to face her, she could see its long black lank hair, its stubbled and cracked face and then finally the black piercing eyes. An ice cold sickening sensation welled up from her stomach. He could see her. In fact, he was staring straight at her.

Without the slightest voluntary intention of doing do, Jan opened the door and stood, still, waiting, able to focus only on those eyes. But they were not as she expected, filled with menace and hatred. He was crying. He was actually crying. Then tears changed inexplicably to fear. The figure was no longer staring at her but somewhere behind. Jan felt sick. She momentarily closed her eyes in resignation and then forced herself to slowly turn around to confront this new menace. There, at the end of the narrow corridor, was a shape. No, that was not quite right, it was not at the end of the corridor, but somewhere beyond. Pale grey, amorphous, almost shimmering. As it moved slowly forward, it began to resolve into something. Not human, but a crude, out of focus approximation. It seemed to slide and grow at the same time, stretching out towards her. Jan felt pulled towards it. She wanted to scream. She needed to scream but she could not. Her body felt as if it were no longer hers to control.

There was something else, something hidden within the shape. Something that was slowly emerging from deep within. Jan could almost sense it reaching out to touch her. She had been wrong. There was no malevolence, but there was a scent, a sweet smell of rotting fruit...there was...a hunger.

'Dear god, please no.'

The voice came from Jan but, it was unrecognisable. Small,

alone, pathetic. As the shape began to envelop her, tears streamed down Jan's face as her soul filled with despair.

T've found her.' Claire screamed.

Mike ran as he had never run before. But as he entered the cellar, he stopped short. There was Claire leaning over the body of Jan lying on the floor next to a wall. Without a moment's thought, he brushed Claire aside and placed his fingers around her wrist and then her neck.

'Is she dead?' Claire asked in a whisper.

'No.' Mike replied. 'There is a faint pulse.' Mike watched, as the others caught up in the drama of the moment, stood unresponsive in a semicircle around him.

'For god's sake, don't just stand there. Call a fucking ambulance.'

Mike helped himself to another glass of Champagne and reflected that the CERN people certainly knew how to organise a party. He was temporarily standing alone in a crowded hotel conference suite and was taking a few moments to study the surroundings. Although he had arrived over two hours ago, the constant needs of networking had provided little opportunity to look beyond the pink name badges they had been given. The room had an elegant 19th century appearance but had probably been built in the 1990s. The LED screens and hide-away sound systems were a little too well integrated for the decor to be genuine. Mike was usually quite adept at this type of occasion. If a freelancer was to be successful, the ability to network was almost as important as the ability to use words. Nevertheless, he could not get into the spirit of this one because there were other things on his mind.

The long awaited relaunch of the newly upgraded Large Hadron Collider had gone well, helped by free food, drink and a chance to be seen, which had attracted a passable gathering of the great and good. This, in turn, had attracted the international media and even though they had unknowingly been denied a meaty story, the past success of the collider, guaranteed good coverage even if confined to the inside pages. This was exactly what the CERN people wanted and so everyone was happy.

Apart from his fellow hacks, Mike recognised almost no one and those he did were far too lofty for casual conversation. He therefore, like so many others, had spent his evening moving quickly through the throng in a purposeful manner, talking briefly to strangers to ensure that he did not look conspicuously

unattached. Sometimes, this yielded useful nuggets of information and contacts. However, most of the time it simply produced a barely suppressible urge to yawn.

Mike checked his watch to see whether it was too early to leave. Absence from these events was often more noticeable than presence and it would not do to been seen leaving too soon. However, he was looking forward to getting away as quickly as etiquette permitted. Tomorrow would mark a return to his St John's Wood flat and a well-earned rest away from the computer, science and most of all, his demanding agent.

'Mike.'

An invisible foreign voice called out his name and it took a moment to register that it was addressing him.

'Mike. Over here.'

The voice this time was accompanied by a waving arm and locating the owner, Mike smiled as he recognised the tall slim mid-fifties figure of his friend Johann Svensson.

'Johann, I did not know that you were here.' Said Mike almost shouting above the party noise to ensure that he could be heard. 'I suppose you have been tied up with all the official stuff.'

'Yes. Do you like the party? Can I get you another drink?'

'Thanks, but no. It's very nice but as of this evening, I am on holiday and this time I intend to take full advantage.'

'Of course. By the way, how is Miss Carraway? Have you heard anything from her?'

'She is fine.' Mike replied. 'In fact, we had a chat before I left my hotel room. Incidentally, I would like to say thank you for arranging her to stay at St Lorraine. It did her the world of good. She is almost like her old self again.'

'What happened must have been very traumatic for you both.' Johann answered sympathetically. 'But I am pleased to hear that she has recovered well.'

Then Mike lowered his voice almost to a whisper. 'I am also grateful to you for putting an end to any further experimentation on the Noril'sk. Still, your relaunch went well

enough without it.'

'It's we who should be grateful to you. God knows what could have happened if we had sampled it in our own collider. I think we are all very concerned that Jan had to go through what she did to make people realise just how serious this could have been. And of course, you helped put an end to our little information problem'

'Well.' Mike replied with a tone of uncertainty. 'I'm only sorry I could not find the culprit.'

I take it you remain convinced that Dr Prince was not responsible.'

'Oh, there can be no doubt. He simply did not have the computer skills. In fact, the only person who does is Jan.'

'Yes, we did consider that.'

'Not for too long I hope.' Mike feigned alarm. 'She was hardly likely to report something that she was responsible for.'

'Do not worry my friend. We do not think it was her. Most importantly, the problem has stopped thanks to you, although it would have given me peace of mind to have a name.'

I suppose so.'

'Now, I know that you are eager to leave, but there is someone I would like to introduce you to. It won't take long and I think you might be interested.'

Mike looked at his watch with a dubious expression. However, in his position, it was not good practice to turn away a possibly useful contact and a man in Johann's position was likely to have a quality network. He simply nodded and Johann led the way through the chattering crowd and out of the conference room. Once in the hotel lobby, Mike took a deep gulp of fresh air. He had not appreciated just how stuffy and hot the other room had become. They made their way to the end of the foyer and entered yet another room. After the noise of the party, this one had an almost audible silence, which was enhanced by the fact that the lights had been set low.

Mike realised that he was still holding his glass and looked for somewhere to set it down. It was then that he noticed that

the room was not empty as he had supposed. An elderly and vaguely familiar figure was sitting in what appeared to a large 18th century chair.

'Allow me to introduce Mr Mike Jordan. Mike this is...'

'Stephan Zidane.' Mike interrupted as he approached the figure and held out his hand. 'The founder of ASRI hardly needs an introduction.'

'Parley vous français?' The elderly man spoke in a quiet but firm voice.

'Je regrette, non.' Mike stumbled through the only French he knew.

'Ah well, my English, she is not so good either. You enjoy the party. Yes?'

'Thank you, yes. I assume that there is more to this meeting than exchanging social niceties.' Mike said, realising that there had to be a purpose to this introduction.

M. Zidane was an infamous recluse and certainly not the sort to indulge in casual introductions to journalists unless there was good reason.

'Excellent. I like that.' Zidane replied. 'I think we both get along like a burning house. Johann, please give Mr Jordan some Champaign, but the real one. How you say, the good stuff. Is that not right?'

Mike smiled politely. He was beginning to sense a story and one that he was not sure that he would like.

Zidane sat down with a weary look. Johann, can you explain please. I grow very tired.'

As far as Mike could recall, Zidane must be in his early or even mid-nineties and he suddenly looked every year of it. Johann gave Mike a glass and indicated for him to sit down on a sofa opposite Zidane.

'ASRI is not a large organisation by international corporate standards, but it does have a substantial slice of the government contract market. A considerable amount of that work is politically sensitive for one reason or another and that can mean we have to work closely with national security people. In

a small number of cases, that working relationship requires government officials and even the military to run ASRI projects. Never very satisfactory, but a fact of life.'

Mike began to feel very alarmed. He was only too aware of the stories, some apocryphal, others probably not, that led him to keep very clear of pseudo-political entanglements.

'I am not sure that I want to know this. I am a science writer, nothing else.'

'A little more than that, I think my friend.' Zidane interrupted in a quiet voice.

Mike looked puzzled and Johann picked up the theme of the conversation.

'I hope you do not feel insulted, but I had to check your past before asking you to assist with the little problem in England.' 'I see.' Mike replied.

'But do not misunderstand our intentions. It's just useful to have someone with experience.'

'Perhaps you could explain where this is leading too.' Mike replied with a tone of concern.

For a moment, Johann said nothing as if uncertain how to respond to Mike's reactions. Then he nodded his agreement and continued.

'Mike, can you tell M. Zidane about your fears concerning the Noril'sk meteorite?'

'I can but you are just as well versed.'

'It would help.'

Mike looked sceptically at his friend but decided there was no good reason for him not to go along with whatever these two had cooked up. At least for the moment.

'The meteorite has a long history of causing severe psychological disturbances. I am sure that your own people can be more specific about the reasons if not the causes and that is the nub of the problem. We know what it does but not why.'

'And yet from your own account, you failed to act on your serious concerns until Ms Carraway had her breakdown.'

I would have thought that it is your people who must take

responsibility for that.' Mike replied defensively.

'But none of them have direct access to the board like you.' Zidane responded coldly. 'You could have bypassed the formal channels.'

'Do not be worried, my friend.' Johann responded hurriedly, in reaction to Mike's evident growing anger. 'This is not an interrogation.'

'Well it bloody well feels like it.'

'We simply want to establish your interest in the work.'

Mike sipped his drink while he composed a reply. The reality was that they had a point. And he had asked himself the same question during the months he had watched Jan descend and then re-emerge from her... madness. That was the only word for it.

'I suppose that like everyone else I was curious. I also supposed that after more than thirty years, science had progressed sufficiently to understand and control it. Arrogant, I know.'

'Precisely,' Johann replied with just a hint of schoolmaster, 'and you are quite right. It was Doctors Pierson and Stanton's responsibility to have properly managed the programme, and it was my fault for placing you in such an untenable position.'

Mike looked at his watch. 'I am sure that this is all very cathartic, but I am not sure where it is leading too.'

'We would like you to return to Dorset.' Johann suggested quietly.

'Now, why would I do that? As I told you earlier, I am taking a holiday.'

'Because the concerns remain.'

'For you, not me.' He had begun to feel very angry and fully intended to show it. 'ASRI may be small but I am sure it has ample staff to spy for you.'

'In a normal way, yes, but this is not a normal situation.'

'Is it not, and what is abnormal about it?'

Once more Johann paused. But this time he looked towards Zidane for reassurance. The hesitant manner in which he was

proceeding did nothing to assuage Mike's concerns and he was strongly regretting having not left the party when he first thought of it.

'There is good reason to presume that ASRI will be used to continue the experiments.'

'What do you mean by 'used'? I thought... You confirmed, not more than twenty minutes ago, that the experiments have been stopped.'

'They have, for now, but that position can change. The important thing is that I am not talking about simple analysis tests although that would be bad enough. I am talking about a fully developed programme.'

Somehow Mike was not surprised to hear this piece of news. Whilst he had hoped that common sense would prevail, the commercial benefits were obvious.

'What kind of programme?' He asked tentatively.

'As you are well aware my friend, the most significant scientific debate at the moment concerns trying to develop a single theory that will explain how all matter and energy works. For over half a century there have been two perfectly acceptable ideas, but both cannot be right. The scientific kudos that will stem from finding that theory of everything is incalculable, and ASRI has accepted that the Noril'sk is the key. That's in addition to the obvious military advantages of a material that seems to be able to affect the mind.'

Mike had had enough of this conversation and stood up to leave.

'Thank you gentlemen, for the drink and the invitation, but no, I am simply a science writer.'

'I'm afraid we cannot let you walk away from this.'

'And exactly what do you mean by that?'

'Mike, I am very sorry if this threatens our friendship, but this matter is of great importance. Now please sit down.'

Mike pondered for a brief moment about whether to leave the room but decided to remain for the moment. The truth was, they had piqued his curiosity. He sat down.

'I began this conversation with a history lesson, but now I want to talk about the present and future. Because of the type of work we do, we are not always free to make our own decisions.'

'But M. Zidane owns the company. Surely he can do what he likes.'

'Hardly. Firstly, there are shareholders. We also have to compete for important contracts and they frequently come with strings.'

'Tell him the truth.' Zidane interrupted once more.

Johann looked a little embarrassed.

'M. Zidane has little control over the board. The most important decisions are taken by a group called the Special Projects Division.'

'Oh, I see.'

'I doubt that.' Johann replied. 'But it does not matter. What you do need to understand is that if this were simply about economics, it would not matter quite so much, but we all, in this room, understand that this goes far beyond commercial interests. The Noril'sk is a source of some kind of powerful force that we do not understand. But we do know that in certain circumstances it can affect the mind and even cause death. In the wrong hands, it could be developed into a very destructive weapon. Once you alerted us to this, we recalled the sample. But it did not reach ASRI HQ. It was...acquired.'

'Acquired.' Mike found himself subconsciously mimicking his friend. 'Do you have any ideas who acquired it?'

'We do. It was intercepted by one of those people which a certain government imposed on us.'

'I assume that you simply cannot ask for its return.'

Zidane, who seemed to be sitting so quietly that Mike suspected he had fallen asleep, stirred in his chair.

'Mr Jordan, we are not little boys asking for our ball back. We are talking about a threat to a multi-billion Euro industry and tens of thousands of jobs.'

'And the lives of millions of people.' Johann chipped in.

Potentially, yes.' Zidane responded with a weary look aimed at Johann. 'I am not trying to convince you that ASRI has a purely altruistic interest. We are, after all a commercial organisation. However, these people are only concerned with its military advantages. Such an approach is likely to result in severe restrictions to one of the most crucial discoveries of the millennium. If they succeed, this discovery will not benefit us, science or indeed the wider public. I understand you care little about my company's future. But consider this. If this material is kept out of sight, then no one can be sure of the dangers that you said you were so concerned about. But we are confronting very powerful people who have small concern for individuals. Our only solution is to ensure that we have full access to the details of the work at Duncliffe. That way, we can at least try to minimise the risks.'

Mike had been carefully considering their line of thought and although it was neatly packaged in logic and commercial sense, it did not quite ring true. It seemed to Mike that there had to be something else, something that they were not telling him.

'Who is running Duncliffe Manor?'

'Ostensibly it is still Dr Pierson.' Johann replied. 'Dr Stanton remains in charge of scientific research. You should know that after you left, both were bitterly opposed to the recall of the Noril'sk and lobbied both us and CERN to continue the research. That will count for much as they are scientists of excellent reputation and have something that everyone else will not have.'

'And what is that?'

'Knowledge of how the material behaves. I have no doubt that both have been asked to take a role in any further work. However, to answer your question, the farm security and its day to day management are now in the hands of the special projects people.'

I see.' Said Mike although he was not at all sure that he did. Look, can you cease these linguistic acrobatics and tell me

straight what you think is happening.'

'M. Jordan.' Zidane interrupted in an impatient tone. 'We do not know. That is why we need someone like you. Special Projects Division is a British Ministry of Defence team imposed on ASRI. They were put in place to ensure that certain programmes are both strictly controlled and kept secret. ASRI cannot act officially without endangering billions worth of contracts, but neither can we allow the name of ASRI to be associated with this. Another scandal would simply be the end.'

'Gentlemen,' Mike began cautiously, 'can I again remind you that I am a journalist. If this is an MoD operation, they are hardly likely to give a journalist free reign.'

Johann smiled in a manner that made Mike feel deeply uncomfortable.

'We are not asking you to return to the farm. As you say that would be impossible. We need your expertise to help the person who is...' He paused to consider which phrase he should use, 'assisting us.'

'Who might that be?' Mike replied with a sense of apprehension.

'Someone you know very well.'

'Mr Trantor. May I have a word please?'

Bob stood over the seated form of the new head of security Andrew Trantor, who had taken up residence in his office, much to Bob's annoyance. Trantor stood up and towered over Bob, who was himself six feet tall. The new man was an imposing figure. Broad, muscular, ex-army and stiff as an ironing board. Once Trantor had reached his full height, he looked down his nose at Bob, with an air of disdain, as he did with everyone.

'What is it Dr Stanton?' He enquired with engineered politeness.

'I appear to be locked out of the control room.'

Trantor briefly displayed a look of impatience before resuming his more usual expression of barely disguised contempt.

'Did you use the correct code?'

'I used the same one as I used yesterday.'

'Then that is your explanation. As I find myself constantly repeating, all the codes are changed daily. It is part of the new security measures. Every morning you must obtain a new code from one of my team.'

Bob's face flushed red. Not through embarrassment but with anger.

'If I'd known what it entailed, I would never have approached ASRI in the first place.'

'But you did Dr Stanton and now I am here to help you, irrespective of whether you want that help or not. Now, why don't we both go down to the control room.'

Bob followed Trantor to the entrance of the basement. The old 17th century panelled door had been replaced with something that looked as if it belonged in a Hollywood science fiction film. Large, solid and full of small flashing lights. Trantor swiped a card through a box fixed to the side of the door and stood still for a moment as it scanned his eyes. The door then popped open to the tune of something that sounded vaguely Japanese. Bob trailed Trantor as he made his way down the stone staircase and towards the control room door. This entrance had also been upgraded in a similar fashion. Once inside, however, Bob began to feel more at home.

'Have you seen the communiqué from ASRI SPD?' Trantor enquired once the door was safely closed.

'Do you mean this morning's email?' Bob responded sharply.

Trantor nodded but said nothing.

'Then why didn't you say so. Yes, I have seen it. It seems straightforward. Poznan is now ready for use and we can control all activity from here.'

That is right. No people and so no danger of any

inconveniences. The local workforce will only enter the complex after you have completed your experiments just as you have instructed.'

'You are sure?' Bob replied with an overtone of unmistakable urgency in his voice.

'Quite sure, you may begin at 18.00 hours. Prince, Bentley and Baker will be here to assist.'

'Excellent.'

'Oh, and one more thing, Ms Carraway is returning. She will resume her responsibility for the computer systems.'

Bob became alarmed. 'When?'

'Tomorrow sometime and I share your concerns.' Said Trantor, misreading Bob's reaction. 'Not my responsibility of course but I would not have chosen someone who had just recovered from a mental breakdown for such sensitive work.'

Bob could hardly contain his contempt but bit his tongue. For the moment Trantor was a useful ally.

'Jan was highly sensitive to the effects of the Noril'sk. We cannot afford another incident. That is why it is so important that Poznan is unoccupied.'

'Then you have no need for worries on that score. Now, as it is approaching your deadline, I must leave. I don't want to have to report myself as a security risk, do I?'

He smiled at his own joke and left. As the door closed, Bob relaxed visibly. Unfortunately, Trantor was the price he had to pay in order to pursue his theories. After that dreadful night with Jan, their untamed journalist, Mike Jordan, had lost no time in reporting his concerns. Bob had no idea that he was so close to ASRI's director of science. The next morning a van appeared with instructions to collect all samples of the Noril'sk and for a while, it seemed that was that.

It took over a month to persuade ASRI of the potential value of their experiments. Then they heard nothing for a further two months until one afternoon Liz received a call giving permission for work to continue. Within minutes Trantor appeared from a part of ASRI called the Special Projects

Division. Then another month passed as the place was turned upside down. The barn was converted into a new set of living quarters for Trantor and his people. All sorts of security systems were installed and the control room was upgraded. ASRI must have invested millions and had made it clear that they expected results. Bizarrely however, the science division failed to play ball. They seemed to be creating all kinds of obstacles, almost as if they were deliberately trying to delay things. Bob shook his head. Company politics were not his concern. Finally, he had an opportunity to explore whether there was any proof for his hypothesis and the Noril'sk was the key.

Bob looked at his watch. Brendon and Claire should be arriving soon.

As a postgraduate, rather than an employee, he had only managed to hang on to Claire by threatening to resign. Trantor simply saw her as an unnecessary risk. Bob wondered whether he would have gone through with it, if Trantor had forced the issue. Claire however, would certainly have tried to dissuade him. He smiled to himself, but then of course, she would. The other surprising factor was that Brendon had been allowed to remain. It was clear that Trantor was unaware of his past activities. It was also clear that Liz was responsible for hushing things up. That in itself was very strange. Bob did not know much about Liz's past, but he was aware that her ex-husband was a gambling addict and that his habit had all but bankrupted them. Why she had gone out of her way to ensure that Brendon remained at the farm, was beyond his understanding.

The door once more produced its brief and annoying jingle. 'Almost late.' Said Bob, once more looking at his watch.

'Sorry,' Claire replied, 'we had problems getting the new access code.'

'Then I suggest that you both request new codes each morning as you are supposed to.' He replied curtly. 'Now, I will go through the aim of this evening's work. I hope you are both feeling refreshed, we have a long night ahead of us.'

'Where's our friend Baker?' Asked Brendon. 'Hasn't had an accident by any chance.'

'Dr Baker will not be attending this session but will be joining us later.' Bob replied curtly. 'Shall we get on?'

He handed each a manila file for which they had to sign and then directed them to a small table and chairs at the far end of the room. He gave them ten minutes to read through the papers before continuing with the briefing.

'So far, we have confirmed that the Noril'sk samples react to high velocity impacts and gives off an unknown form of energy. Other physical reactions are: That it produces a small amount of methane gas. Methane of course, consists of hydrogen and carbon and given that neither the sample nor its environment contained carbon, that is one of the many mysteries we have to solve. The sample also increases in mass after successive impacts and shrinks if those impacts cease for any period of time. We have no idea where that additional mass comes from or goes to.

The detailed analysis shows that it can produce a significant number of exotic sub-atomic reactions. Of particular interest are the trails that seem to move between dimensions. Finally, we cannot forget that it also appears to affect the human brain, which results in strong emotional reactions. Have I left anything out?'

'I am not sure Jan would appreciate having what she went through, described as an emotional reaction.' Brendon replied with a tone of sarcasm.

Bob responded with a withering look.

'I know there has been a lot of speculation about whether there is any connection to the more intriguing aspects of our history. I would remind both of you that we are here to study the real world, not the paranormal one. However, I agree that we could be dealing with a form of energy that may be stimulating the fear centres. On that basis, all tests will be conducted remotely and no one will be permitted within the test site.' Bob paused for a moment to check his papers. 'We

will run a series of tests to establish the following: Firstly, to understand the nature of the Noril'sk and in particular the nature of the energy it produces. Secondly, and I would like to emphasise, more importantly, to establish where these exotic particles are going.'

'So, we are back on to your second time-eye hypothesis.' Replied Brendon, barely suppressing a smile.

Bob's face remained impassive. 'Thank you, Brendon. I am well aware of your views. In fact, I value them as a challenge. I am sure I can rely on you to thoroughly contest the evidence.'

'Was there any doubt.' Brendon replied sullenly.

Claire had been looking with increasing alarm at her two colleagues and decided to interrupt them to prevent the discussion deteriorating into another row.

'I am concerned,' she began, 'that we are not doing enough to establish whether Jan's theories were right. Is it simply causing hallucinations or is it somehow...' She hesitated for a moment as if unsure of how to phrase what she wanted to say. 'I know this sounds silly, but could it somehow be connecting her to the past which Jan might have misinterpreted as ghosts.'

You are not being silly at all Claire.' Bob replied. In fact, I think that there could possibly be a connection between the apparent particle movement across dimensions at the subatomic level, and Jan's experiences in the macro-world. If we can prove a link, we can all retire very rich indeed.'

'Then you are not dismissing Jan's experiences.' Claire added.

'Not in the least.' Bob replied. 'At various times, we have all seen something. The question remains, was it the result of a side effect of the radiation on our perceptions, or the result of a breach between past and present moments. Both are of interest to ASRI and to us.'

'And you think you can use ASRI for your own ends?' Brendon observed clearly unconvinced.

That is not what I am saying. Brendon, if you have any objections, you are free to leave. The presence of the special

projects people means that Liz can no longer keep you here. But make your mind up now, because after tonight, there is no going back.'

'I cannot believe that you agreed to this.' Mike strained to keep his temper under control.

'I would have thought that the reason was obvious.' Jan replied coldly.

'Not to me, it isn't.'

Mike stopped pacing the floor and looked thoughtfully at Jan who was sitting on the sofa in his room at the Oak pub. On his return from Switzerland, he had immediately made his way back to Stour Provost village and booked himself into the pub so that he could be close to the farm and even more importantly, to Jan. He would have preferred to have intercepted her before she returned to the farm, but it took two days to track her down.

Then to his great relief, she turned up out of the blue. One of his many messages had finally reached her. Mike's initial idea had been to try to persuade her not to return, but he already knew that would not be possible. Jan had a very stubborn streak when her mind was set on something.

'Look, I am sorry for getting angry, but after all, you have been through, I am naturally concerned. I will never forget those early days. Hours of screaming followed by days of silence. The times when you didn't know where you were or even who you were...'

Mike broke off, unable to face the memories he had tried so hard to suppress. Jan looked up from her absent-minded staring at the floor.

'I know.' She replied softly. 'In a funny way, I suppose I am fortunate in that I can remember so little. However, the fact is that I am missing several months of my life. I have vague memories of terrible dreams but little more. Do you have any

idea of how disconcerting that is?'

'So, you want to find out what caused it?'

Well, yes and no.' Jan replied. 'What I mean is, that is only part of it. I know we have talked about this many times, but I don't think you were able to grasp the most significant point.'

'And what is that?' Mike replied cautiously.

'The fact that what I saw just couldn't have been a simple hallucination.'

I never said that it was.' Mike replied defensively. 'Besides which, we now have fairly reliable evidence that whatever you saw was an accurate recollection of the times.'

'Yes, that is strange.' She paused for a moment and smiled faintly to herself. It's ironic that as someone who rejected faith for science, I should now firmly believe that this is a matter of faith. I cannot prove what I saw and what it means, but I ask you to believe me when I say that somehow, I connected with another time. What I experienced was real.'

'Can I ask you a question which might make you angry?' Mike began cautiously.

'Go ahead.'

Mike took a deep breath. 'Why are you so convinced that this was not just a hallucination brought on by the Noril'sk. After all, we know only too well that it produces some kind of radiation.'

'In fact, at the time I was convinced it was just that. I clearly recall walking through that 17th century house, firmly believing that it was all an illusion.'

'What changed your mind?'

'Seeing Rupert Everington cry and then become terrified. It was completely out of character with everything we thought we knew about him.'

'Oh, I see.' Mike replied.

Mike sat down beside Jan. He took hold of her hand and looked directly into her eyes.

I do believe you, but I also believe that the ASRI people have no idea just how dangerous that stuff is, otherwise they

would not be trying to continue with the experiments. There is something very disturbing about that meteorite. Whilst you were ill, I did some more checking. John Stewart and Peter Ellis had the same experiences as you. By that I mean not only were both driven out of their minds by visions, but their medical records show that both experienced the same mix of personal and interpersonal visions.'

Jan raised her eyes in surprise. 'What do you mean by interpersonal?'

'I mean that like you, they saw things which terrified them as individuals. Peter apparently saw ghosts. The type he would have seen in contemporary comics. You know. Headless figures, emaciated skeletons and floating sheets. John was apparently terrified of spiders and you.'

'Felt completely alone.' Jan interrupted. 'But you still have not said what you meant by interpersonal experiences.'

'I was coming to that. The records for Peter are quite sketchy but John's were comprehensive. I suspect you all had two things in common. Firstly, the same experience of the little girl Lizzie Strider, Rupert Everington and the third and less defined vision. If you believe in the existence of ghosts, and I still do not like using that word, it could provide an explanation for what you saw. However, it cannot explain the second common factor. You all kept repeating the word Noril'sk. If you recall, the old lady spoke about Peter murmuring the word and we had no idea how a young, 1960s lad could have possibly known about it. Apparently, his psychiatrist thought that it referred to that ephemeral vision.'

'What about in John Steward's case, was that the same as me?'

'In some ways yes, and in others no. You both completely withdrew into yourselves. When you showed any reactions at all, it was spent repeating that word for days at a time. However, you came out of it, which John did not...There is something else I have not told you.'

'And what is that?' Jan murmured almost to herself.

I strongly suspect that Liz has also experienced the same vision. I can't prove it of course. Because she is still alive, it is impossible to get hold of her medical records.'

Jan looked puzzled. 'What makes you say that? She never said anything apart from when she was sick.'

'That was not the time I was referring too.' Mike interrupted. Liz Pierson. Dr Elizabeth Angela Pierson nee Turner along with John Stewart were part of a team of three who experimented with the Noril'sk in 1973. She also spent several months in hospital and on her own admission, experienced something terrible. You saw her reaction when Bob mentioned he had a sample.'

'I remember.' Jan reflected.

'Another interesting fact is that Angela Turner, as she was then known, was the only daughter of the Reverend Ian Turner. I'd bet a year's pay she has seen Lizzie and simply kept quiet about it. So, I agree with you, that this is no simple hallucination. Something about that energy force is giving anyone who is sensitive, a shared vision. I have no idea whether that vision is real or simply conjured up to induce fear but there is a definite connection.'

'Conjured?' Jan responded in surprise.' You seem to be implying a deliberate act.'

'Am I?' Mike muttered despondently as he realised what he had just said. 'No, the whole idea is ridiculous. Forget it.'

Mike paused for a moment and then shrugged his shoulders. Jan, if you believe that it was real, that somehow you connected with the past, that is good enough for me. As to what it means, I have no idea. But one thing I do know is that this meteorite is quite, quite dangerous and I do not want you there when those fools start bombarding it again.'

Jan stood up and went to the sink to get herself a glass of water. She glanced out of the window on to the pub garden, which was filled with patches of daffodils. She still could not quite grasp that so much time had passed. Jan shook her head slightly to herself and then took a sip of water before turning

around to look at Mike. How could she explain what was driving her need to return to the farm, when she barely understood the reason herself. The approach by Svensson had given her the perfect excuse but the truth was, she had already made up her mind.

There was also the added benefit that Mike could not return. Since they had spent that one night together, he had seen her every day for months, but she had not seen him. It was not that she objected to his familiarity. Quite the contrary, his dependable presence had helped her through the ordeal. So much so that she had insisted to Svensson that Mike be close at hand, but she needed time to bring any relationship back on to an even keel. Then a sudden thought occurred.

'Mike, one small factor seems to have eluded your investigations. A fact which undermines your whole assumption.'

'Really?' He replied in a sceptical tone.

'Yes, really. You have just said that Peter Ellis, John Stewart and I had identical experiences as a result of some sort of force given off by the Noril'sk when it was subjected to physical attack. But the Noril'sk was several thousand kilometres away in 1961. There is no way it could be responsible.'

'Good afternoon Ms Carraway.'

The voice belonged to a man who Jan did not like the look of at all.

'My name is Trantor and I am in charge of security.'

Jan recognised the name from her conversations with Svensson and decided to have a little fun.

'Ah yes, Mr Trantor, can I see some form of ID. I can hardly take you at your word given the secure nature of the work here.'

She had meant to be ironic but Trantor actually looked pleased.

'Full marks Ms Carraway.' He showed her his pass which she

took pains to carefully study. 'I am glad to see at least one of you is taking this seriously. May I say how well you looking.'

"Thank you, Mr Trantor. Are the others about?"

'Everyone is in the basement apart from Dr Pierson. However, before I issue you with your pass, there are a couple of formalities to go through. Would you take a seat?'

He pointed to a small wooden chair on the opposite side of the desk and he began to complete a lengthy form. Jan watched for a moment before getting bored. Her attention strayed to a very solid looking door between the kitchen and the rest of the house. A small red light blinked intermittently on grey box at about head height. She had been warned to expect changes and was beginning to suspect that life would be quite different from the cosy, almost intimate atmosphere she was used to.

'I see that you maintained contact with a journalist called Michael Jordan.' Trantor said in a manner that could easily be mistaken for a sneer.

'I have maintained a purely private friendship with him, yes.' Trantor looked at Jan searchingly which made her feel very uncomfortable. She decided to go on the offensive.

'As you must know, he was here on official business and was personally recommended by the director of science. What you may not know is that he is a personal friend of Johann Svensson.'

'Thank you, I was not aware of that. Nevertheless, I must ask for your assurance that you will not discuss ASRI business with him.'

'I can assure you that I will not be discussing ASRI business with anyone who has not been authorised. Now have we finished? I would like to unpack and then join the others.'

About thirty minutes later Jan found herself descending the stone staircase that led to the basement corridor. As she reached the point where she had first seen the young Striker girl, Jan began to feel a little dizzy and had to steady herself using the stair handrail. Although she had tried to mentally prepare, the cold reality of this homecoming brought forth a

flood of unwelcome memories. Jan closed her eyes and fought to control her emotions.

The door to the control room opened and the face of Brendon appeared and broke out into a beaming smile as he recognised her.

'Hello there.' Brendon smiled as he boldly marched towards her which ended in an engulfing hug. 'How are you, old girl?'

At least some things had not changed. There followed a brief round of welcome hugs until she spotted an unfamiliar face.

'Yes, of course.' Bob said. 'You will not have met our latest recruit. May I introduce Alan Baker. Alan, this is Jan Carraway our computer expert.'

'Nice to meet you.' Jan shook hands with the slim thirties something figure.

He was not bad looking although a little gaunt for Jan's tastes. Blond haired, blue eyes and a pleasant smile. An altogether more pleasing figure than the other newcomer.

'Your arrival is quite timely Jan.' Said Bob. 'I have just started the briefing session for this afternoon's work.'

They all marched into the main meeting room where they sat down with the exception of Bob who stood in front of a whiteboard, marker in hand.

'Based on previous discussions our programme will be to... One, establish the nature of the force that the Noril'sk produces. Jan, all of the actual tests will be conducted by remote control and so there is no danger of a repeat of past incidents.

'I know. That was part of the agreement for my return.'

'Two, to establish whether the Noril'sk is a reliable source of exotic particles. Three, to establish whether we have a reliable source of particles traversing between dimensions including the one we refer to as time. Four, to understand the nature of how that happens, and build a reliable model to control that action.' Bob stopped in mid flow and looked at Jan once more. 'I appreciate that this does not fall within your personal theories, but it has been agreed to confine our

programme to this line of thought.'

'In fact, it fits in with my theories very well.'

Bob looked nonplussed and Jan decided to continue.

'It is true that I was convinced that somehow we...' She stopped for a moment to consider. That I was experiencing something which in general terms could be described as ghosts or spirits. Perhaps even a reflection or memory that certain people are sensitive too. However, although there are many things I am not able to recall, I was able to accurately recollect the details of the house from the time I woke up until I entered the final corridor. Mike arranged for a specialist in historic buildings and construction to discuss my experience and have a look at photographs of the cellar. He was able to confirm that I precisely described 17th century domestic fixtures and fittings including the feel and look of the fabrics I encountered and the smells such as fish oil candles. Not only that, he was able to confirm my description of the layout of the house and basement, and that included the changing positions of the doors. We all knew there were two blocked doorways in the end cellar but there was no way of knowing about the old access routes because they no longer exist and there are no obvious physical signs. He was only able to confirm my description because of slight changes to the floor tiles. It seems pretty clear to me that somehow I connected with that reality and I think that has some connection to your theories about the nature of time.'

For a while, no one said a word and it was the unfamiliar character Baker who broke the silence.

'That is quite an account Ms Caraway.'

'Jan.'

Baker smiled. 'Then you must call me Alan. I was going to say that although I have no idea how something like that could happen, it could explain a lot of things.'

'Such as?' Claire asked.

'We all know the stories, which have dogged the Noril'sk. Apparitions, ghosts if you like. The entire population of Aszep

seemingly went mad after the meteorite crashed near Noril'sk. Local legends have it that they were driven into the forest by spirits where they died of exposure. There is enough evidence to conjecture that impacts, even quite low level ones, create some kind of energy force which affects the mind. Now, let us suppose that when the Noril'sk fell to Earth six hundred million years ago, much of it broke up in the atmosphere and covered the entire planet with a thin layer of dust. Some of that dust could have been incorporated into building materials.'

'Hey, I see what you mean.' Brendon interrupted. 'That is quite a supposition. You are effectively saying that mankind's entire history of hauntings could be the result of contamination.'

Baker made an involuntary face. I would not go that far, but I think it could explain certain types of visual impressions.'

'I am sure that is a fascinating hypothesis.' Bob observed. 'But how do you relate that to the exotic particles we are here to discuss?'

'We would have to be pretty loose with our conjecturing, but again, suppose these exotic particles are moving not simply between different physical dimensions but also different times. Space and time are perhaps one and the same thing. We just perceive them differently. Your original tracings clearly showed particles disappearing and reappearing. If current thinking is correct and time consists of a series of folds, which become more dense close to a large mass, then you might expect to see just such a pattern.'

'As the particle moves through the peaks and back into our perception of time.' Said Bob excitedly. 'As you say, pure supposition but an enticing one, but I do not see how that connects with what you were saying about meteorite dust combining with building materials.'

'Not just any meteorite but a specific fallout. The Noril'sk was simply the inner core. I suggest that we analyse the chemical make-up of the basement stones and compare it with material from other sites of well-known hauntings such as

Chillingham Castle.'

'And look for what?' Asked Brendon raising his eyebrows in a look of inadvertent scepticism.

'For the same signature as the Noril'sk of course. Consider this. If we find a relationship between volumes of Noril'sk residue, periods of construction activity and the reputation of the area, then we might solve two mysteries at the same time. In fact, the answer might have literally been under our noses for thousands of years.'

Chapter ten

'Hold it steady.'

Bob almost screamed as he watched the monitor with a rising sense of panic. The sound of the Poznan collider motors coming through the tannoy system had become so loud that he was having difficulties hearing what Brendon was saying.

'It's no good.' Brendon's voice drifted across the room from the speakers. 'The power is fluctuating. Their generator can't keep pace with the demands of the collider. We must reduce power.'

'No,' Liz intervened, 'you will do no such thing. We will lose two days' work if that happens.'

'Then what the hell do I do?' Brendon shouted over the intercom.

For a moment, no one said a word. Each stopped what they were doing and stared at Liz as she stood in the centre of the control room, seemingly oblivious as her mind raced to find a solution.

'You have less than twenty seconds before we lose her.' Brendon interjected. 'Then you will have to explain why millions worth of equipment...'

'Don't lecture me boy.' Liz shouted and then seemed to come to a decision. Jan, I want the power routed to each motor in sequence within the cycle. Brendon, you must maintain the power levels and ensure there are no spikes.'

Everyone fell silent as they divided their attention between watching their respective display screens and listening to the sound of the distressed collider coming from the speakers. The discordant sound slowly escalated in pitch until it moved beyond their sense of hearing and everyone breathed a short

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sigh of relief before resuming their allocated tasks. Bob looked at Liz and murmured a silent thank you before he too focused on how to rescue his plans.

'What happened?' Bob spoke into his collar mike to Brendon.

'It's just as I predicted,' came the reply, 'Poznan is too old. Our systems are overcompensating when it can't keep up with the speed of our computer instructions. I had programmed the controls in line with the spees I received, but it seems that there are some maintenance issues. It has been out of commission for three years. I said it wouldn't be able to cope if you recall.'

'Can you do anything about it?' Bob asked impatiently but immediately regretted it. The problem was not Brendon's fault. In fact, he had been even more diligent than usual.

'I think so. It's just a matter of matching speeds. Give me a few minutes.'

'Yes, of course...and sorry for being a bit sharp.'

Bob crossed the room towards Liz who was staring thoughtfully into space.

'We were lucky.'

I know.' Liz replied. I will talk to HQ. We will have to get a new team in to check the place thoroughly this time. However, we cannot afford to fall behind schedule otherwise we will both be looking for new jobs.'

Bob said nothing and returned to his position next to Jan. He took a moment to look around the control room to reassure himself that everything was in order. Jan was in her usual position, overseeing the computer control systems and monitoring reactions to ensure that the particles took the right path through the various collider chambers. Brendon was in the power room, but this time it was being used to control a system which was over a thousand kilometres away on the border of Poland and Germany. Claire was seated on the right hand side of the room in front of an array of computer screens. She was responsible for ensuring that the results were being recorded and Baker was sitting next to her. His responsibility

was to ensure that all the new equipment worked.

'I have reprogrammed our computer to match the speed of the Poznan one. So, fingers crossed.'

'Thank you, Brendon.' Said Bob. 'Is everyone ready?' He checked to see that they all were, before continuing. 'Brendon, please start transmission and keep me informed on progress.'

'Transmission started. Poznan is matched and we have seventy-five per cent capacity. That's 1.2 Terra electron volts.'

'Then let's try for eighty for our first collision.' Bob replied.

This time the speakers remained silent and everyone in the room focused on their individual tasks. If all went to plan, they should shortly obtain information on the nature of the radiation without experiencing any of the unpleasant side effects. If they could understand the nature of the problem, it should then be possible to control or eliminate it and that was their key to creating an endless supply of exotic particles.

'Brendon, we will go on the tenth.'

'Understood.'

After the stress of the day's events, the first successful conclusion of an experiment seemed to be something of an anti-climax. A few moments later Brendon and Jan quietly confirmed that a collision had taken place, but the faces of Claire and Alan remained impassive. Bob looked down at his notes and wrote a few comments.

'We will take it up to eighty-five and try again.'

Once more, each carefully monitored the collider as the particles built up speed in the acceleration chamber before being transferred into the main ring. As soon as the computers confirmed that they had reached the correct speed, the particles were deflected into a collision course, racing round at close to the speed of light in opposite directions. The actual collision passed unnoticed in the macro-world. It was only after the event was long over, that human invention could catch up with the sub-atomic universe. Bob and Liz watched with anxious faces for any reaction from Claire and Alan. Again, their faces remained impassive. This time it was Liz who crossed the room

to Bob and a hurried whispered conversation took place.

'Brendon, what is the risk factor if we move up another five points?' Bob asked hesitantly as if he already knew the answer.

There was a brief pause.

'That is at the very outer edge of our safety margins even if we were using our own collider.'

'But it is still within specifications?'

'Just.'

'In that case, we will try again at ninety per cent. Is everyone ready?'

This time the replies came without enthusiasm and within a few minutes, an audible hum of power came over the speakers. As before, everyone kept a close eye on their respective monitors as the particles accelerated fractionally closer to the elusive speed of light. Once more, half the monitors showed that a collision had taken place and the other half registered no reaction.

'This is ridiculous.' The words were spat out in an exasperated tone. 'Claire, are you absolutely sure the sensors are not picking up a response.'

Claire's face remained blank. I'm sorry but no. There is simply nothing there.'

Then I think that, is that.' Bob remarked to no one in particular. 'I suggest we all take a break and reconvene in the lounge in an hour.'

Everyone started to make a move for the control room door when they were stopped by the voice of Liz.

'Just a moment please.' She looked at Bob in a purposeful way. 'Let's talk.'

Liz and Bob moved into a quiet corner for a hurried conspiratorial conversation. The others tried to look disinterested but strained their senses in a vain effort to hear what was being said. Each had a sense of dread of the outcome. Once the conversation had finished it was Liz who took control.

'I want everyone to listen carefully. We are going to have

another go. Brendon. You will increase power by one per cent as I command until I tell you to stop. Jan will be responsible for venting the particles if you detect any significant problems, but I expect any such decision to be justified.'

'And you will back me in that judgment?'

'Yes,' Liz replied, 'now, is everyone ready? Brendon, power up to ninety and then level off.'

'Initiating power build up. Poznan is responding within specifications. Acceleration can begin on my mark...Mark.'

'Stage one in progress. Particle acceleration building nicely.' Replied Jan.

The sound of the electromagnetic motors began to build as did the tension within the room. No one spoke out of turn as they each strained their hearing to detect the slightest change in sound that might foretell a problem.

'Liz, we are at ninety per cent.'

'Then move to stage two.' Liz replied firmly.

'Transferring particles... stage two in progress.' Answered Jan.

'Increase to ninety-one per cent. Claire, I want to know the moment you detect any signs of a reaction.'

There was a short pause before Brendon confirmed the level had been reached. Liz looked to Claire who shook her head. She then instructed Brendon to go to ninety-two per cent. This time the pause was longer as the particles struggled to edge fractionally closer to the speed of light. Again, Claire indicated no reaction. Liz involuntarily shook her head in despair. Even she was beginning to doubt the wisdom of what they were doing. She looked to Bob for moral support, but his attention was entirely focused on the screen in front of him.

'Brendon, go to ninety-three.' Liz tried to convey a confidence she did not feel.

The pause this time lasted a full five minutes until Jan spoke to confirm that acceleration had reached the required level. Claire shook her head once more but could not face actually looking at anyone else in the room. It felt almost as if she was

personally responsible for the equipment failing to record anything.

'This can't be happening.' Liz murmured quietly to herself. 'None of this makes sense. Last time we were getting reactions at far below this level.'

By now the others were aware that she was talking to herself and were looking alarmed. The danger of what they were doing was so extreme that the last thing they needed was for the director to crack. Abruptly the self-doubt evaporated and she came to a decision.

'Go to ninety-four.'

After what seemed like an eternity, it was Claire who broke the silence.

'I have something.'

'Are you sure?' Said Liz trying to keep her voice calm.

'Yes, it's very small but there is something.'

Liz and Bob rushed over to Claire's monitor and looked. The reaction was barely registering, but there was a reaction.

'Brendon, can we take to ninety-five?'

There was no reply.

'Brendon did y...'

'I heard you.' Brendon interrupted irritably. 'OK, but I will cut the power at the slightest fluctuation.'

'Understood.' Liz replied.

The team listened intently to the silence until Brendon confirmed that the required level had been reached. Jan then took over the commentary on the progress of the particles. Then it was Claire's turn. She barely had a chance to speak before there was a sudden rushing sound coming from the speakers as the power was cut.

'Did you get a reaction?' Liz asked.

Claire looked at everyone in turn before replying.

'Yes.'

Just over an hour later the team reluctantly gathered in the lounge to consider that afternoon's events. Everyone was tired and showed none of the usual enthusiasm to share views. Even the room itself seemed to have taken on a gloomy appearance as the sun passed behind a tall break of trees, casting a long shadow across the small deep-set window. Last to arrive were Liz and Bob and the expression each was wearing did nothing to lift the mood. Liz took her usual place in a large centrally positioned armchair which almost seemed to swallow her. Bob sat close by on the edge of a sofa.

'Well now,' Liz struggled to introduce a note of energy into her voice, 'Bob, can you let us have a summary of what happened.'

'Yes Bob. Do let us hear again just how badly we have cocked up.'

Normally, Brendon's ill-timed acerbic remarks would have drawn an instant condemnation, but on this occasion, everyone shared his view.

'The aim of today's experiments was to produce a quantity of exotic particles and to analyse any radiation coming from the reactions. Based on previous experiments we should have produced around one hundred traces. Instead, we produced.' He looked towards Claire.

'None.'

'But I thought we had some reaction from the last two collisions.' Brendon interrupted.

'Reactions yes, but no trace of the particles we were looking for.'

Brendon looked crestfallen. 'I can tell you that if we push Poznan that high again, there will be a very large hole in the Polish countryside.'

There was a moment's hesitation as they all considered the reality of just how near they had come to that.

'Perhaps on a more constructive note, does anyone have an idea concerning why.' Asked Liz, eager to raise the tone of the discussion but unwilling to condemn anyone's pessimism.

There was sullen silence.

'In that case, let us go through the points one by one.' Liz said as she gave up waiting for someone else to contribute. 'Brendon. Can you confirm that the power levels were accurate? You had computer problems at the beginning.'

'I checked with the Poznan team when they re-entered. The power consumption levels matched my own readings.'

'So, we know that the motors were working. Jan, what about the particles themselves?'

'I also checked with the Poznan team although they did like not their integrity questioned. They definitely loaded the correct amount of the right samples and the local computers recorded the same speeds and reactions as we did. All of the collisions produced were just what we might expect if we had collided a piece of iron. Actually, Claire was not quite right. There was one trace that could have been evidence of transmission out of our space-time dimension but it was too small to be sure.'

'What about radiation, are we able to quantify it?'

'Within the chamber, we saw standard reactions and radiation bandwidth. Outside of the reactor, there was nothing. Absolutely no sign of any leakage, which is just as it should be.' Answered Claire.

In other words,' Brendon summarised, 'we might as well have been colliding a piece of cheese.'

'If that is the case,' Liz continued, 'what differences are there between our original experiments and Poznan that might explain what happened today?'

'Geographical location.' Brendon suggested.

'Spatial location.' Added Claire. 'If we are talking about movement through space-time then that may have an effect.'

'It just might.' Bob smiled. 'There could also be a systems or software fault.'

'I am having a complete systems check carried out. The results should be with us by morning.' Jan replied indignantly.

'Anything else?' Liz asked hopefully.

'The one thing that we have not considered is whether this material has a half-life.' Said Bob. 'We know that the Noril'sk has certain properties similar to radioactivity. It could simply be that we have exhausted it.'

'How could we test that?'

'The only way I know of is to duplicate the original testing conditions exactly.'

'We certainly can't do that.' Jan replied with a shudder.

'No, of course not.' Bob replied. 'No one wants to see a repeat of what happened last time. That is why Poznan was reopened.'

Once more there was a silence as people ran out of things to say. But this time it was spurred by uncomfortable memories rather than desolation. Alan Baker, who had been sitting quietly in the background, stood up made his way to the coffee pot which sat ignored on the sideboard. He had seen Claire bring it into the lounge, but no one seemed to be in the mood to drink. Alan poured himself a cup and watched a wisp of steam rise from the hot liquid.

'Is that it?' Asked Liz disappointedly. 'In which case, the only constructive thing we can do is wait until the results of the Poznan checks come through and then, if that shows nothing, start again.'

'Just a moment,' Alan hesitated, 'I think we may have missed something.'

'And what might that be?' Brendon responded with a note of sarcasm.

'Bob said that the only way to be sure that the sample remains valid is to repeat your earlier experiments exactly.'

'I also said that that was not possible.'

'I know you did, but the point I am making concerns one obvious difference between your original trials and Poznan.'

Everyone's attention was fixed with looks of blank expectation.

'Come on now people.'

A look of slowly dawning realisation crept across everyone's

faces. Had they bothered to glance in the large mirror on the wall, the answer may have been apparent sooner.

'Is it possible that the Noril'sk can only react in the presence of another source of energy?' Mused Brendon.

'There are plenty of natural examples.' Claire responded. 'A lightning strike is created when electrons are stripped from rising air. This creates a charge. However, it can only act in relation to the opposite charge in the clouds.'

'Exactly,' replied Alan, 'the question is how, and even more importantly why.'

'Actually, a more pertinent question concerns how we might prove it.' Brendon responded, irritated that it was Alan who had probably come up with the right answer.

'We could, in theory, use a simian species. They share basic fear responses with humans.' Alan volunteered.

'Absolutely not.'

I agree with Jan.' Said Brendon. 'The use of animals for experimentation is a dubious enough activity when used to save lives. This is hardly in that league. Besides which, I doubt we would get a licence within our schedules.'

'I suppose so.' Replied Alan who was taken aback by the strength of feeling. There is another alternative. We could generate an artificial source of energy.'

'Could that work?' Asked Bob.

'All energy is a form of electromagnetism. We simply have to create the same cycles to which the Noril'sk is attracted.'

'Artificial?' Questioned Mike doubtfully as he struggled to swallow a mouthful of steak and kidney pudding. The Oak served a particularly nice version, although given the saturated fat levels he saved it for special occasions. 'They think they can mimic human brainwaves sufficiently well for it to work?'

'Apparently so,' Jan replied, 'Alan's speciality field includes electromagnetism and he appeared quite confident.'

'Well, I am in no position to doubt him, but it seems a little farfetched. Mind you this whole thing seems farfetched. You were explaining why the experiment didn't work.'

'In fact, I have just about finished. It seems possible that whatever energy is given off by the samples, can only react in relation to another form of energy.'

'I suppose that is reasonable,' Mike replied, 'and it could explain a number of things.'

'Such as?' Jan enquired.

'Why only certain people are susceptible. People generate different levels of electroactivity. Perhaps it also requires a specific type of energy from people. That was delicious.' Mike looked pleased with himself as he pushed his plate away and picked up a napkin to wipe his lips.

'Yes, I can see,' Jan replied, 'you still have half of it on your face. Here.'

She took hold of the napkin and proceeded to dab his chin as if he were a little boy.

'I'm glad you didn't spit on it first.' Mike smiled a wry smile and noted that Jan blushed faintly. 'So, how are you feeling about being back, after you've had a few days to get used to it.'

'I am OK. It is strange being there again but there have been no signs of Lizzie or Rupert I'm glad to say. Even your picture has stayed put in the bottom of the wardrobe.' Jan smiled warmly. 'Did you know that you left a couple of jumpers behind?'

'I thought I was missing some.'

'Colour does not suit you at all, I think.'

Mike smiled and changed the subject. Tell me more about the two new people.'

Jan sipped her wine whilst she considered. Trantor is exmilitary. He has it written all over him. He also has a scientific background. Not that he says much, but he made a couple of references that made me think he knows his way around the international conventions. I very much doubt that you two would get on, far too formal. His apparent main concern is

security, but I am not so sure.'

'What makes you think that?'

'Oddly enough it was something that Alan said when he was talking about the set up at Poznan. Although Trantor takes no formal part in the experiments, he seems very interested in what is going on. In fact, on a few occasions, he appears to have anticipated equipment and calibration needs.'

'And what about Alan? I notice that you use his first name but always refer to Trantor as Trantor.'

'Do I.' Jan replied mischievously. 'I suppose that's just the way they present themselves. Alan definitely has a full science background. His CV is impressive particularly in his specialist area.'

'Quantum theory.' Mike interrupted.

'I should have known that you have already done the research.' Jan replied huffily. 'Why do you play these games?'

'Sorry. Actually, that is all I know, so I would be very interested in anything more you have.'

Jan gave Mike a dubious look before continuing. 'He has worked for ASRI for a number of years and from what I can gather, always on special projects, in recent years at least.'

'What's he like as a person.' Mike asked and leaned forward in a conspiratorial fashion. 'Is he someone we can trust?'

Possibly, I am not sure.' Jan replied hesitantly. 'He seems affable enough.'

'Well, see how things go. Another ally could be useful, and I would feel far more comfortable if it was not always you taking the risks.'

'I have to admit that Trantor is keeping an annoyingly close eye on me, but I think you are taking this master spy stuff too seriously. Things have certainly changed, and the security can be irritating but...'

'Jan,' Mike interrupted with a grave tone, 'do not underestimate the situation you have put yourself in. The people ASRI are involved with, are highly adept at playing dangerous games and they don't much care about removing

anything that gets in their way. So, you must let me know when you want to leave.'

Jan placed her hand on Mike's. 'Don't worry, but yes I will let you know if I want to leave. That's all I can say about the farm, but what about you. How was your trip to London?'

'Very productive, although also very confusing. But before I explain why, do you want another drink?'

Mike stood up and went to the bar. For a Tuesday, it was comparatively full and Harry was serving in the public bar. As he waited Mike stared at Jan sitting in the corner next to the fireplace and wondered what she was thinking. Mike knew she must be feeling uncertain about their relationship. A one-night stand followed, not by a painful farewell or a gradually blooming romance, but months of enforced dependency. That should have killed any chances off but it had not. Instead, they were in a kind of relationship limbo. More than friends, but not quite lovers. He would have preferred some sort of resolution, but he knew that Jan simply was not ready. And if truth be known, he was not ready to risk losing her by forcing the situation.

Jan looked up, obviously aware of his attention and smiled. A fleeting but powerful memory stirred of that one night. Mike definitely needed another drink.

Mike closed the door to his bedroom and threw his jacket over the back of an armchair. There was a brief flash of light through the window as Jan's taxi manoeuvred its way out of the pub car park. He crossed the room to the dressing table and poured himself a large whisky before checking the clock. It was 10.30pm. Coming to a firm decision he picked up his mobile phone and dialled a quick dial number that would connect him to his friend Johann in Gothenburg. They had agreed not to contact each other until the ASRI situation had been resolved. The potential for compromise to Johann's

career of being seen to work against his own board of directors was undeniable. However, Johann had given him a number in case of emergencies. It was true that this did not quite meet that criterion, but his visit to London was sufficiently worrying to warrant a discussion even at this time of night.

Johann, it's Mike.' He said even though there was no real need for introductions as he knew that he was the only person in England to have this particular number. 'I'm sorry to call you so late.'

'Mike, you did not call for a small chat, I think.' Johann replied.

'I did not. I need to ask a few questions. Is this a convenient time?'

'Provided that it does not take more than a few minutes, I have dinner guests who are about to leave.'

'Then I will be as quick as I can. Johann, when did ASRI first obtain a sample of the Noril'sk?'

There was a long pause before the reply came. You have a reason for asking that question?'

'I do indeed. You see I made a trip to the National Geographical Society in London today. The library contains a paper by a man called Professor Meredith who in addition to lecturing at Southampton University, was also working as a consultant for a company called Cambridge Electronics. That company obtained a sample of the Noril'sk in 1973 via Meredith. About two years later they bought a disused shale works in Wales. Somewhat unusual for a company that essentially invested in circuitry components, and so I wanted to find out more. I did an online search of the local history sites and found a very helpful ex-miner who was able to confirm that Cambridge carried out mineral extraction tests. Nothing came of it and the quarry remained disused.

Cambridge was taken over by ASRI in 1977. The following year ASRI bought a number of disused shale and sandstone mines in several countries. None of these were developed as commercial enterprises but some have been used for small

scale excavations. However, there seems to be no records of where that material went. Do I need to go on?'

Again, there was another long silence, which ended with a very hesitant voice.

'You appear to have been very thorough in your homework Mike.'

'But you have not been quite so diligent in yours. Did you really think I would not find out?'

'Quite the contrary, I was sure that you would.'

'Then why the deception?' Mike demanded impatiently. You gave everyone the impression that CERN had requested the original research. You then told me that part of the ASRI company over which the board has no control, was driving this new research. Now I find out that ASRI has a long running interest in the Noril'sk. I suggest that you provide a bloody good explanation, otherwise Jan and I will be leaving for London tomorrow.'

'Mike, you put me in a very difficult situation. Much as I value your friendship, my first loyalty must be to ASRI.'

'That's your choice,' Mike replied coldly, 'but my first loyalty is to Jan and I will not have her involved with this unless she has the full facts.'

There was a brief pause whilst Johann came to a decision.

'My friend, you are quite right. It is true that ASRI saw the potential of the Cambridge research. The people back then realised that there was something very special about that meteorite but there were no samples available. There was a chance that certain rock formations might hold a recoverable amount from the fall-out when the meteor broke up in the atmosphere. But the technology at the time was simply not up to the task.

You must understand that most of ASRI's investments are very long term. However, politics tends to be very short term. The Noril'sk project has simply been overtaken by the current events. I did not intend to mislead you. Yes, it is true that we have an interest in developing the science. And yes, it is also

true that there are a number of commercial possibilities; whether they are the corporate reputational ones such as being the first to find the elusive theory of everything; or more lucrative prospects of new forms of energy. What special projects has done, is effectively highjack that work for more covert objectives. If they succeed, then governments could lock up the science in a web of national security edicts.'

Now it was Mike's turn to fall silent. Johann's explanation seemed plausible but at the same time, he had not been candid. Mike rapidly came to a decision.

'All right, we will leave it at that. But I hope you have not been keeping anything else from me.'

'Jan, Brendon. Are you ready to initiate phase one?' Asked Bob into his lapel microphone.

He waited for both to reply before making a note on his check sheet. It had been four days since the last test. In that time the maintenance staff at Poznan had been replaced and a thorough testing programme carried out. It had identified no further problems beyond an antiquated computer system. In addition, they had rigged up a transmitter that would produce a low level energy signal to mimic the human brain. They had also verified that the software was working according to specification.

Today's work should confirm two things. Firstly, whether the Noril'sk matter was still active and secondly, whether the strength of the reactions was dependent on interactions with another form of energy. If both ideas were proved, they should finally start to produce the exotic particles required to verify the existence of other dimensions.

Bob began to experience a sense of exhilaration that he had not felt in a long time. He slowly became aware that Liz was standing next to him. Until recently she had taken little part in the practical side of their work. Her role was executive, but they

shared a strong interest in the Noril'sk. She gave him the briefest of smiles and murmured a good luck wish. Bob took in a deep breath.

'All right everyone, before I initiate today's work I have something to say. We have had the test results from the stonework in our walls. You will be interested to know that the mortar contains a trace of the Noril'sk signature. Something for us to think about. OK! We will initiate phase one.'

'Building power.' The voice of Brendon drifted across the room from the hidden speakers.

'Let me know when we reach sixty-five per cent.' Answered Bob.

'Why are you are starting at such a low level?' Asked Jan. 'We had to exceed ninety-five last time.'

'Because if the artificial energy emitter works, we should see results at much lower and safer levels.'

'Sixty-five.' Brendon marked in a flat tone.

'Initiating phase one acceleration.' Replied Jan. 'The emitter is producing beta waves.'

Voices silenced as each focused on their allocated tasks. An audible hum could be heard over the speakers. It began to climb in pitch but nobody took any notice.

'Transferring to stage two.' Said Jan.

The noise suddenly escalated and Jan turned the volume down a little; glad that the accelerator was based in another country. So far, the sound levels had simply proved unpleasant. Had they actually been in Poznan it would have been like sitting underneath a jet engine as the particles accelerated to near the speed of light.

'Brendon, I need a running commentary on the accelerator.'

'Power at sixty-five and holding steady. The accelerator is behaving like a lady.'

'That was not quite what I had in mind.' Bob muttered underneath his breath.

'Claire, read-out levels?'

'All within specification.'

Bob whispered to Liz. 'My god, I think this is going to work.' But he firmly crossed his fingers.

'Transferring to stage three.' Said Jan.

'Brendon, collide at the twentieth. I want this to be done by the book.'

'Confirm, collision at the twentieth.'

The hum coming from the speakers moved out of hearing range and then it was all over. Everyone present in the control room stared at Claire's and Alan's backs as they studied their monitors. Then Claire slowly turned around and smiled.

'It worked.'

The end of her sentence was drowned in a roar of cheers, which Bob had difficulty suppressing. The broad smile on his face made it impossible to instil any kind of discipline, but he was not unduly concerned. Bob waited a few moments for them to enjoy themselves before making a serious attempt to be heard.

'OK, OK! That's enough.' He waved his hands to get their attention. 'Claire, what level reactions did we get?'

'Over four hundred and textbook traces.'

Another round of cheers ensued.

'Calm down everyone, we have a long day ahead of us.' Said Bob, once more trying to get people to focus on the task in hand. 'We have to complete this series before we can move on to the main work of the day.'

'Bob,' the voice of Brendon interrupted, 'it might be an idea to take the level down to fifty-five or even fifty.'

'Why, is there something wrong?'

'No, not wrong but we seem to be generating an ample response and the motors are running a little hot.'

'Any particular reason?'

'Probably the containment is struggling a little. Nothing serious but I think it best not to overdo it.'

'Yes all right, we will see how fifty goes. We can always increase the level if it generates insufficient reactions. Jan, can you take charge please. I need to have a chat with Liz.'

Jan nodded and Bob and Liz left the room. They crossed the corridor and entered a small room on the other side that people used for meetings.

'What did you manage to find out?' Bob enquired urgently.

'Not as much as I could have hoped.' Liz replied. 'This facility is not seen as secure.'

'But we sorted out the problem of leaking information. The tap could have easily been installed remotely.'

T'm afraid that view is not shared at top level. They firmly believe that the source of the leak was local and Trantor is being very difficult. In any case, the main problem is not historic but current. There seems to be some major infighting within the board. We come under the Science Directorate, which is apparently at war with New Business. Trantor comes under New Business and so we have become the front line.'

Bob rolled his eyes in exasperation. 'So how do we take this forward? I am not going to hand the discovery of a lifetime to any government. This belongs in the public domain.'

'I agree, but we have no channels to find out what is going on or indeed, links to anyone who can make our case.'

'This is ridiculous. It's bad enough having to deal with Trantor's people. Now we seem to have become embroiled in some internecine squabble.'

'Yes well,' Liz responded with some sympathy, 'we were an unimportant, albeit reliable testing facility, of no particular interest. You and I and have made ourselves both visible and important, and at the worst possible time.'

'You would have thought that fact should guarantee access.'

'Only if we are saying the right things, Bob. The board is interested in just two things, whether we succeed and the speed at which we do it. Anything else is of no concern.'

Bob stared at the floor for a moment whilst he tried to think of an alternative solution.

'What about Mike Jordan? He turned out to be pretty thick with Johann Svensson. Perhaps he could be persuaded to help us.'

'Perhaps so, although he was responsible for having the testing programme stopped. I am not sure he would be sympathetic.'

'But this not about the ethics of the programme, it's about ensuring the information is freely available. I would have thought that a journalist would see the importance of that.'

'You may have a point. I think Jan has remained in touch with him.'

At that moment, the door flew open and Claire burst in.

'You'd better come quick.' She said and ran back out of the room.

Neither Bob nor Liz hesitated before following. It was not in Claire's nature to panic. Something serious must be wrong. As soon as they re-entered the control room, both became aware of an urgent discussion between Jan and Brendon. They were each alternately reeling off sets of numbers, which quickly led to the conclusion that the experiment was out of control. Liz realised that this was a critical moment and not a good time to interrupt.

'Reactions at 10,000 and holding.' Jan's voice was calm but determined.

'Power levels at seventy-five and climbing. Christ! I have no idea where it's coming from.'

'Please confirm that all generators have been disengaged.'

'Confirmed. All generators are disengaged and...all are now powered down. Power levels at eighty and climbing.'

'The only option is to vent.'

'Yes, I agree.' Brendon replied.

Jan paused and looked towards Liz and Bob as she became aware of their presence.

We have a chain reaction. Unless we stop it, the reaction will begin to consume the accelerator. Venting is the only option.'

'I trust your judgement.' Liz replied.

Jan turned back to her console. She took a deep breath and began to punch in a series of codes. A moment later the panic

was over and the room became still.

'I want to know exactly what happened.' Bob demanded.

Jan glanced at her nearest speaker as if that would enable Brendon to see her predicament and help out. But of course, it remained silent.

'I'm sorry, but I will not be able to answer that before we have analysed the readouts. However, until then we cannot carry out any more work.'

'Very well,' Liz replied on Bob's behalf, 'but I want that report by the end of today.'

It was just after 9.30pm when everyone gathered in a large meeting room. It was a sombre gathering of tired people who would far rather have been in their own rooms watching TV. But everyone was well aware of the potential implications of what had happened earlier that day. Venting the particles into Poznan's underground chambers had avoided nuclear contamination, but it would now be out of commission for several months. Jan was the last to enter and she was carrying a large wad of paper, which she proceeded to carefully arrange on the conference table. She then made her way to the only free space available next to Liz and Bob.

'I apologise for the lateness of this meeting.' Liz began. Tomorrow morning, I have to brief the board...' She hesitated for a moment as she noticed something was amiss. 'Why is Mr Trantor not here? This is as much a security issue as a scientific one, given what might have happened.'

There was no response and Liz continued. This afternoon we came within minutes of causing a catastrophic event of international importance. By the time we leave this room, I will need a detailed understanding of what went wrong. Jan if you could kindly begin.'

Jan had remained standing. She was not quite sure why. It would have been just as easy to talk whilst sitting down, but

somehow the subject seemed too important.

'As a point of simple clarity,' she began, 'nothing went wrong. At least not with any of the equipment, control systems, software or the accelerator. In fact, until I vented the particles, all the systems registered that we had the same textbook experiment as the first time.'

'Jan, I do not see how that is possible.' Bob said coldly.

'I understand. Nevertheless, it is quite true. Brendon, Claire and Alan have confirmed that.'

Bob looked at the three and each separately nodded their agreement.

'However, on examining the traces, there were two major differences between the first and second trials. On the first occasion, we verified last year's results. The Noril'sk sample produced a generous number of traces that included particles with broken tracks. However, the second time we seem to have particles moving in the opposite direction. There was a two-way exchange which then increased exponentially. If you have a look at the first paper.'

She paused for a moment whilst the papers were passed hand to hand around the room.

'The first one shows a classic pattern. However, if you look at the next, you will see the number of traces has doubled. Not only that, but they appear to be moving in reverse. The next shows six, the next twenty-eight and so on. By the time we got to 13,888, the process had become self-sustaining.'

'The sheer number of traces were generating sufficient energy to keep the reaction going.' Added Brendon. 'That was why there was no change when I cut the power. Jan and I have carried out four separate checks. There is absolutely no chance of system failure. What we saw.' He paused as if unsure of himself. 'What we experienced was something akin to a white hole.'

'And what precisely is a white hole?' Trantor asked with his usual disdain as he walked into the room.

Everyone looked up, resentful of his presence but noted that

his face was pale and drawn.

'Mr Trantor,' Liz began, 'are you feeling all right?'

'Thank you, yes. My apologies for being delayed. I was asking about a white hole.'

'The opposite of a black hole of course.' Brendon replied tartly.

'I would prefer to keep this conversation constructive.' Liz interrupted. 'A black hole occurs when gravity becomes so dense that nothing can escape it. Everything is sucked in, including light. It has been speculated that a white hole is the exact opposite, a point in space where particles emerge. Some speculate that the big bang itself was one of these. Particles are sucked in from one universe and then spat out to create ours.'

'What would have happened had Ms Carraway not vented the particles?'

'Another big bang.' Brendon answered glibly.

'That is neither helpful nor entirely accurate.' Bob replied sharply. 'The question is, where did those multiple traces come from and where did they go?'

'Mr Baker, quantum physics is your area of expertise. What do you make of this?' Asked Liz.

Alan shifted uneasily in his seat as everyone looked in his direction. He reached over for the papers Jan had brought in, studied each in turn and then went through them again. Then a slight smile crossed his lips.

'If you look at the printouts in sequence, you will notice that the outer edge of the paper becomes progressively filled with dotted grey lines. This seems to confirm that the number of particles is increasing. In fact, I would venture that the term exponential is appropriate. However, if you look at the centre, there is just one point, and one point only in all the printouts. That would suggest two things were happening.' He paused for effect but sustained it for a little too long.

'Would suggest what?' Liz responded impatiently.

'Firstly, that some of the particles generated were moving in and out of our universe, our dimension. That is why the lines

are dotted. The fact that, as the sequence moves on, there are new traces that start at the outer edge, would imply that new particles are entering our universe from somewhere else. But the most interesting fact is the last one.'

'And that is?' interrupted Liz once more, irritated by Alan's needless theatrics.

Brendon smiled a guilty smile. He was determined that Alan should not steal all the thunder. 'The particles are travelling back to the point of origin. In other words, they are travelling backwards in time.'

'Indeed.' Alan replied coldly. 'We opened up a connection between two or more dimensions. Matter came through to feed the reaction and so it continued even after the power was cut. Had we been expecting it, we could have controlled that reaction by turning off the artificial stimulus.'

Everyone in the room looked stunned as the full implications began to sink in. Slowly the gloomy looks were replaced by ever broadening smiles.

'Well, that was unexpected.' Liz remarked. 'Serendipity indeed.'

'I am sorry to put a damper on this occasion. However, I must insist that this is not discussed with anyone outside of this room until I have permission from Cardiff.'

'Now just a moment Trantor.' Brendon began to sound angry.

Liz held up her hand. Listen to me everyone. Mr Trantor is quite right. This is a momentous discovery but it must be given proper consideration. If we are wrong, any leaks could be disastrous. I suggest that we all go to bed. We have had a very long day.'

Everyone stood up to leave the room but were stopped by the voice of Brendon.

'Hang on, I think we have forgotten something.' He leaned across the table and held out his hand towards Bob. 'Congratulations. I take back everything I said. Your second time-eye theory, as daft as sounded, was absolutely spot on.'

Bob said nothing but beamed.

Jan lay gratefully on her bed and made a mental effort to enjoy the peace and quiet of her solitude. It seemed an eternity since the alarm had yanked her from a cosy dream this morning. She glanced at the clock and had a little difficulty in focusing on the small illuminated numbers. In fact, she was feeling a little giddy which was not altogether surprising after such a long day.

Jan picked up the clock for a closer look and then quickly replaced it as she realised just how late it was. She would have loved to have called Mike but did not want to disturb him. Instead, she got up and made her way to the bathroom to get herself a glass of water.

Jan was glad she had been given Mike's old room, despite its final unpleasant memories. She was also glad that he had not asked for his jumpers back. Her face flushed with a momentary expression of guilt as she saw one of them lying on the pillow. Jan crossed to the window and drew the curtains before getting undressed. It was odd, but even though it had been months since that night, she could still occasionally imagine the merest hint of the fish oil candles, which would bring the memories flooding back. On two occasions, she had even gone so far as to search, smelling all the furniture, curtains and timber beams to try to locate the source but the scent remained elusive.

Her mild dizziness seemed to be getting worse and she lay back down on the bed. Despite all her assurances to the others, she was finding life back at the farm more difficult to cope with than she had anticipated. After months of enforced rest, she was suddenly working full-pelt and clearly her body was signalling its objections. After a few moments to allow her head to clear, she sat up and took a sip of water before lying down once more.

Jan's attention drifted around the room and settled on a

small picture in the furthest corner. She had never bothered to look at it before, at least not properly. Art had never been a particular interest and this collection of twee rural scenes even less so. But now, tired and exhausted eyes, on the verge of closing, were curiously attracted to the prospect of a mental wander through harvest fields, along a rill through a lonely wood whilst watching the ducks fly into the horizon, fleeing from a tweed clad hunter. Picture to picture to picture, seemed to take her on a journey that merged into a dream as her eyes moved slowly around the room towards the fireplace.

Abruptly... she was wide awake. Flooded cold with fear, her body, rigid, alert, ready to run, but paradoxically refusing to respond to her urgent desires to escape. It was there, eyes staring malevolently towards Jan demanding her attention. She, in turn, fixed her vision on the portrait of Rupert. Not daring to avert her sight just in case. The painting seemed to merge with her memory of his stubbled, age cracked face and malevolent eyes. She took a deep breath and prepared herself to flee, edging her feet towards the floor. For a moment, just for a fleeting moment Jan automatically looked down to the floor to see where she was placing her feet. Scalding herself she returned her eyes to the fireplace. All that was there was a darker patch of wallpaper.

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'Jan, it's just not possible.' Said Brendon refusing to acknowledge what the monitor readout was telling him.

'Doesn't it strike you as pointless in denying what you can clearly see displayed before you.'

'I don't care what the computer says. Basic common sense dictates that it is wrong. There must be a fault either in the programming or the hardware.'

'No.' Jan replied beginning to feel a little angry at Brendon's stubbornness. 'I have checked. The figures show that at 1.30am last night the sensors both at Poznan and here detected a small number of particles.'

'But how could they. How can there be subatomic atomic activity when the accelerator was switched off. Look!'

Brendon leaned over Jan's shoulder and used her keyboard to bring up a number of charts and grids that spread themselves across the monitor array.

'There you see. Nichts, nada, nothing. There are no power readings, no movement, no particles being accelerated. Just what you would expect at that time of night. Therefore, there can be no reactions.'

Jan closed her eyes to steady her temper. 'Brendon, irrespective of the cause, there was a simultaneous recording of reactions both here and at Poznan. They were not ghosts of the earlier readings nor some kind of echo. Neither were they the result of a software glitch. They are entirely new readings. We will have to tell Bob and Liz. There could be another security breach.'

'You know that will involve Trantor.' Brendon responded in an exasperated tone. 'Every time he looks at me, I get the

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feeling that he knows all that happened.'

'I understand, but you have not been gambling, have you?'

'No.' Brendon replied defiantly. 'Oh well, if you must.'

Bob arrived in the control room within a matter of minutes, but Liz was delayed by a meeting with Trantor. When she did finally arrive, both he and Alan came too. This was not what Jan wanted, at least not at this stage because it would make any discussion far more difficult.

'Jan, your timing is not particularly convenient.' Liz snapped. You said something about inexplicable activities. What exactly do you mean?'

Jan took a deep breath and began to explain.

Last night I experienced an incident. The same kind of incident most of us experienced when we carried out the initial experiments. We all believed that they were the result of some kind of side effect from the Noril'sk radiation. However, the tests we carried out yesterday were over a thousand kilometres away. There is no physical way that we know of, for the radiation to reach us. This morning when I was carrying out routine checks, I saw that there were sensor records for last night. At the same time that I had my experience, the sensors at Poznan and here picked up particle generation. You can see it for yourselves on the monitors.'

Jan tapped a key and several graphs appeared, all covered in grey dotted lines.

'There are twenty-eight on each and the patterns are linked. I compared them to the graphs we produced yesterday and they are quite different. In other words, these are new.'

'Tell them about the other readings Jan.' Interrupted Brendon.

Jan flashed an angry look but realised that he was right.

'The records of both accelerators show no sign of activity. In fact, the power to both was switched off and isolated. From a practical perspective, it should have been impossible for a reaction to have taken place.'

'None the less it did?' Said Liz in a questioning tone.

Jan nodded but said nothing. Liz turned to Bob and spoke to him almost too quietly for the others to hear.

'Do you have any ideas?'

Bob looked nonplussed but quickly rallied to the situation. I assume you carried out standard checks.' He said with a marked lack of confidence in his challenge.

'Of course.' Jan replied defensively. 'There are no errors in the sensors, the monitoring programmes or the hardware.'

'How long did the reaction last?'

'Twenty-eight seconds.'

'That long!' Bob replied, clearly surprised. 'In which case, it must have included feedback.'

'Yes.'

'Do you know where from?'

'Here.' Jan replied firmly.

Bob took an involuntary step backwards in surprise. 'Here?' He repeated.

'That is what I said. The patterns here and at Poznan are directly related.'

'Then there can be only one explanation.' Bob replied. 'Somehow we have managed to generate a stable hole through which these particles are migrating.'

'What does that mean?' Asked Liz.

'It means that we are out of our depth. We should cease all further experiments until we understand what has happened here.'

'There could be another explanation.' Ventured Trantor.

'And what might that be?' Brendon cut in with an evident sneer.

'That was quite uncalled for.' Snapped Liz. 'I for one would be interested to hear any ideas. Please Mr Trantor, do go on.'

'Perhaps the two incidents are quite unrelated. Ms Carraway is at the moment simply speculating that there is no system fault. Is that right?'

'Well yes, I have yet to run a full check and that will take at least a day.' Jan admitted reluctantly. 'However, any fault is

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likely to have been identified by now.'

'But it is not inconceivable that there is a problem.'

Jan nodded.

'You said that the two incidents could be unrelated?' Added Liz.

'Indeed. I have no wish to cause embarrassment, but Ms Caraway has only recently returned to work after suffering a major breakdown. Perhaps...'

'You snivelling bastard.'

Brendon made a lunge towards Trantor, which he easily sidestepped, sending Brendon sprawling to the floor. Bob helped him to his feet, and he tried to recover some dignity by brushing himself down.

'I think we had better adjourn to my office.' Suggested Liz dispassionately. 'Mr Trantor, Alan, would you both please join me.'

No one talked as she, Bob, Alan and Trantor made their way up the stairs, but as soon as Bob closed the door to her office Liz rounded on Trantor.

'That was unforgivable.'

Trantor took a moment to reply and when he did, his voice was cold and flat.

T'm sorry you feel that way director, but my responsibility is to protect both the programme and this facility and to my mind, Ms Caraway is a liability. Whilst I have every sympathy for her, I cannot allow the health of an individual to interfere with the progress of your work or the considerable investment that ASRI and the government have put in place to support your speculations. They expect to see a return.'

'Yes of course, but Jan has skills that would be very difficult to replace.'

'But not impossible.' Trantor interrupted.

Liz looked as if she was about to lose her temper but fought to control it. 'I agree that no one is irreplaceable, and I would suggest that you also take note of that.'

Trantor did not reply immediately and then quite

unexpectedly his expression softened. If have a feeling that we both want the same thing.' He began in a more amenable tone. 'However, you must understand that I find the idea of ghosts a difficult one to equate with the work here.'

'Then I suggest that you stop thinking in those terms. Jan was absolutely right when she said that we were all affected.'

'Apart from Claire of course.'

Liz looked puzzled as to why Bob should mention such a minor point and continued with her argument.

Doubtless, Jan is the most sensitive, but we have all experienced odd occurrences after exposure to Noril'sk radiation, if it is radiation.' She quickly added to stop Bob from correcting her on detail again. 'The point is, where do we go from here? If there is no fault with the system, then Bob's idea is probably right and that would certainly bring matters to an end, even if only on a temporary basis to allow time of an independent assessment.'

"Then we have to ensure that a fault is found.' Alan replied in a matter of fact tone.

'I'm not sure I understand what you mean.'

'Dr Stanton, how likely is it that you have created a tear in time-space?'

'I have no idea. It's not the kind of thing one comes across on a day to day basis.'

'Precisely.' Alan responded with an unexpected coldness in his voice. 'It is certainly a puzzle but one, which is most likely to have a perfectly rational explanation without straying into the dubious realms of science fiction. Meanwhile, we have a multi-million pound investment to manage.'

'Point taken but we cannot take the risk.'

'Yes, we can take the risk if it is a calculated one. That is what business is about Stanton. Now, as a sensible course of action, I suggest that we ask Jan to carry out a full diagnostic. In the meantime, we carry on as planned, but we can also set up an alarm to detect any further unusual activity. Is that acceptable to you both?'

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'It is not.' Said Bob in an outraged tone.

'And what does the director have to say on the matter?'

'I am in charge of the science here.'

'With respect Dr Stanton,' Alan raised his voice for the first time, 'you are not in charge of anything. I suggest that you read the agreement you signed. All management decisions about the work here lie with the Special Projects Division and I am their representative. Is that clear?'

Bob stared at Alan with mutinous anger before turning slowly around and leaving the room.

'So, what are you going to do Bob?' Asked Claire looking concerned.

There is nothing much I can do, or so it appears. ASRI has made it pretty clear that the experiments must continue and Baker will see that they do. All of our communications have to be routed through Trantor and his cronies and so there is little chance of alerting anyone to our concerns, unless your friend can help us out.' Bob concluded his sentence by looking directly at Jan.

For a moment, she looked puzzled before realising that he was referring to Mike. 'I am seeing him tonight.'

'The problem is, as Claire said, what are we going to do now?' Added Brendon.

'Carry on as planned. What else we can do.'

The conversation stopped abruptly as Alan entered the control room. Several averted gazes made him quickly realise that he was the cause of the sudden and awkward silence, which continued as each made their way to their respective stations.

'OK everyone,' Bob began, 'just to remind you of what we need to achieve today and the need for extreme caution. We are going to repeat the last experiment to try to understand what happened. We will follow the same procedures as yesterday. However, if there is the slightest sign of a chain

reaction, Jan will cut the power to the beta emitter. Depending on the results we may then move on to see whether we can produce a predictable transition of particles between dimensions. Any questions?'

No one said a word. Brendon left the room and the others began their respective systems checks. About ten minutes later Brendon's voice announced that he had arrived and began a guided narrative through the steps he was taking to power up the system. They then heard him call to Pandar station in Southern Brazil. After a short silence, a thick Portuguese accent replied. There was a brief conversation to confirm that the facility had been evacuated before Bob gave the order to power up the accelerator. Then they all heard the familiar hum coming from the speakers as the giant electromagnets came online.

'Systems are matched.' Observed Brendon. 'At least this one is up to date. We should have no computer problems this time.'

T'm glad to hear it.' Replied Bob. 'By the book please.' He continued before checking to ensure that everyone in the room had heard him.

'Levels at forty-five.'

'Commencing phase one.' Said Jan.

'Hold at forty-five.' Brendon confirmed.

With a nod of Bob's head, Jan initiated phase two and the sound coming from the speakers increased in volume and pitch. Everyone kept a close eye on their monitors as Jan announced phase three and then it was over. Claire confirmed that a reaction had taken place and they all made their required notes. Then Bob informed the group that they would repeat the experiment one final time before moving on to the next stage. As they began the process once more, he firmly crossed his fingers. At this point, Liz entered the room and stood behind Bob. Normally, he would not have minded her presence but her acquiescence to Trantor's demand was still fresh in his mind.

'Claire, keep a close eye on the results. We know the reactions build after each test.'

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'Yes, of course. I'm just getting the initial results through now and...'

She went quiet as she looked at a series of numbers on her screen.

'Is something wrong?' Bob asked. Clearly alarmed at the way Claire had unexpectedly broken off from her narrative.

'Not wrong. At least I don't think so. But the reaction numbers are unbelievable.'

Let me see.' Said Liz in a firm voice. She then crossed the room to look at the screen. After a few seconds studying she turned to Bob.

'There's nothing to worry about. The results are better than expected. Please continue.'

Bob looked doubtful but realised that it was useless to pursue the matter. He instructed Jan to continue. She and Brendon blandly talked the team through stages one and two as the sound from the speakers slowly built up once more. Bob was about to order stage three when Jan held up her hand. She turned up the volume of the tannoy and listened carefully.

'Can you hear something?' Bob enquired.

'I'm not sure. I thought I did. Couldn't you hear anything?' 'No. Not out of the ordinary. Brendon, did you pick up anything.'

'Nothing, all the systems are running fine.'

'Sorry,' replied Jan, 'just getting jumpy I think.'

Bob gave her a look of concern and then resumed his task.

'Proceed to stage three.'

The sound moved beyond their sense of hearing as the particles were accelerated at close to the speed of light, racing around in opposite directions before a slight adjustment to their path set them on a collision course.

'Power levels at sixty-five and rising. It's happening again.' Shouted Brendon, but there was no sense of panic in his voice, just a need to get people's attention. 'Now moving to seventy.'

'Cut the power.' Said Bob.

'I already have. Moving to seventy-five.'

'Do I vent?' Asked Jan.

'No.' Replied Liz.' You will do no such thing. Give it time to settle. Cutting the emitter will work.'

'Now building to eighty and it's still climbing.'

The sound of the engines had once more dropped into hearing range and they were clearly struggling to contain whatever matter had been generated.

'Moving to eighty-five.'

'Liz, it's going critical. I must vent.'

'No.' Came the reply.

This time Bob and Jan turned around to confront her. She was staring vacantly into empty space, unblinking, immobile and seemingly unaware of what was happening.

'We have got at most thirty seconds.' Said Brendon. 'Now at ninety and still climbing.'

Bob moved over to where Liz was standing and placed himself directly in front of her. He called her name but she seemed not to be aware of his presence. He tried again, raising his voice so that everyone in the room could hear. Liz stirred slightly and her eyes came into focus.

'Liz, we must vent.'

'No.' She whispered, but it was a hesitant reply.

'We must.' He looked at his watch. 'If you do not order it, I will.'

Liz made no attempt to answer. She was either unable or unwilling to respond.

'At ninety-five. You have ten seconds.'

Bob looked at Liz and shook his head. 'Vent.'

'Venting.' Repeated Jan.

'Hold it.' Shouted Brendon, power falling back to ninety.'

Bob watched the speaker grill for a moment.

'Now at eighty-five.'

'Do you still want me to vent?' Enquired Jan.

'No, but be prepared.'

Power falling to 75...70...65..... 60.' There was a long pause before Brendon finished his sentence. Power levels at

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zero.' He concluded.

Everyone took a deep breath after what seemed an eternity of hardly daring to breathe at all.

'I'm afraid it's not over.' Claire said nervously.

'What do you mean?' Asked Bob.

'I mean that the reactions have not stopped. They are still at twenty thousand and holding level.'

'What!' Bob cried, stunned at what he was hearing.

He ran across the room to check for himself, but Claire was telling the truth. Deep within the Pandar accelerator was the subatomic equivalent of a chain reaction and then for no apparent reason, it ceased. The room became still. No sound, no movement. Then the silence was shattered by a groan. Everyone turned to find Liz lying on the floor.

Jan sat quietly at her console. The room seemed peaceful and strangely empty after the frantic activity of the day. She sipped her coffee gratefully and tried to enjoy the moment. Liz had been taken to hospital at Salisbury and Bob had gone with her. Trantor had occupied Liz's office and was engaged in secret discussions with Cardiff, at least according to Brendon. Alan had vanished. No one had seen him since before the ambulance was called and Claire was busy checking the results in the lounge.

As she sat alone, Jan's mind began to wonder what they would all do next. Two sets of experiments had both almost ended in disaster, which meant that the Noril'sk was clearly too dangerous for them to manage. The hopes that distance would provide a safe way to oversee the reactions had proved unfounded. Jan could not conceive of any logical way that they would be able to continue and yet she had little faith that common sense might prevail over corporate greed.

The series of events began to filter back through her memory. The enormous generation of particles that had again

resulted in a chain reaction. The lack of an explanation as to why mimicking human brain waves should stimulate an exponential growth in the number of particles produced. The way the radiation was able to leap thousands of kilometres. Not to mention the fact that particles were created when there was no accelerating matter. Jan had no doubt that such questions would keep the scientific community guessing for many years. But she hoped that it was no longer a question for them.

Then a thought occurred as Jan recollected the strange sound, she had heard at the beginning of the second experiment. Taking another sip of coffee, she casually punched up the recording and began to listen. It took a few moments of careful attention, but the more she listened, the more convinced she became that the recording included a sound that should not have been there. It was a faint sound, barely detectable against the noise generated by the accelerator, but it was there.

At that moment, Claire entered carrying a large rolled print out.

'Hello. There's still some coffee in the pot if you want one.' Claire smiled politely and declined. What are you up to?'

'Nothing really. Actually, I was listening to the recording from Pandar.'

'Oh!' Claire replied with some surprise. 'Any particular reason?'

'Not really. It's just that sound I thought I heard. Oddly enough, having just listened to it again, I am sure it is there; but it is so faint that it's hard to tell.'

'Do you think it's important?'

Jan shrugged her shoulders. Probably not but it is a mystery.'

Claire came over to where Jan was sitting and stood behind her.

'Play it for me.'

Jan did as she was asked and as they both listened intently, it became clear that Claire could hear it too. They looked at

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each other with mutual expressions of puzzlement before Claire pulled up a chair.

'Budge over.' She said before taking control of the keyboard. What are you doing?'

'Our systems are based on a Microsoft platform which itself is based on DOS. Although most of the original software has been disabled, I may be able to access an old sound recording programme. If so, we can enhance and analyse the sound.'

Jan watched bemused as Claire opened up a dialogue box she had not seen in years and programmed a series of instructions. Then a new window appeared.

'All right, if I import the recording, we can see what it looks like.'

In front of them appeared a long, sharply angled line which then began to separate into a series of coloured lines. Claire started the recording once more and they both watched and listened carefully. At the point that the strange sound started, a new series of coloured lines appeared. Claire isolated and enhanced the sound and they listened once more.

'It's rhythmic and regular and oddly familiar.' Said Jan. 'Is there any way we can get rid of the accelerator completely?'

Claire isolated and removed the coloured lines that were not required and they both listened again.

'Can we listen to just one line? It is familiar but I just can't put my finger on it.'

Claire did as she was asked and played the sound once more. This time there was instant recognition on both their faces. Recognition and horror.

'What the hell do we do?' Asked Claire.

'Nothing for the moment. We mention this to no one until Bob returns.'

Mike walked into a waiting area at Salisbury hospital and looked around expecting to find a familiar face in the packed

room of children, mothers, aunts and granddads. He had been surprised to receive a call from Johann who he could tell from the call tone, was in Britain and even more surprised to be asked to meet him in a Wiltshire hospital.

Johann was easy to spot. Dressed in a grey suit amongst the multi-coloured casual clothes, he stood out like a beacon. Mike made his way carefully through a net of interweaving children racing around in an effort to stave boredom. The occasional and pathetic attempts by distracted mothers to make them behave had little impact.

'Johann, this is a little unexpected, to say the least. Why here?' Mike enquired.

'You have not heard?' Replied Johann. 'Liz Pierson was taken ill yesterday.'

'I'm sorry to hear that. Is she all right?'

'Physically she is fine and I dare say mentally as well. We arranged for an overnight stay to give us a chance to think and to prevent her from being contacted by ASRI.'

'You lead a complicated life.' Mike commented bitterly. 'But why am I here. I take it not to bring solace.'

'No indeed my friend, you and Liz Pierson need to talk. I am here because of your request for her to talk to me. So, everything fits nicely.'

Mike leaned back in his chair with a doubtful look and immediately regretted it, as he felt something sticky through the cloth of his jacket. A small boy sitting next to him smiled cheekily.

Ten minutes later they were both shown into a private room and found Liz sitting at a desk writing letters. As she heard them enter Liz stood up to greet them.

'How are you feeling?' Johann enquired.

'Well enough.' Replied Liz. 'Thank you for coming all this way. That was kind.' She then extended a puzzled look towards Mike. 'I am grateful for your part in arranging this meeting, but I am not sure it requires your presence.'

'I had the same thought.' Mike replied. 'It seems we are both

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equally in the dark.'

They each looked to Johann for an explanation.

'The reason is simple. I think we are all in a position to help each other.' Johann began. 'Dr Pierson, you want assurance that the results of your tests will be made public. Frankly, in light of current events, I think that is very unlikely. I want control of the project back in ASRI hands. That is also unlikely and you Mike, want some answers about Dr Pierson's past. We cannot achieve what we want individually but we just might if we work together. Firstly, I think we could do with understanding what happened yesterday. Do you mind if we sit down?'

'Is this an official report?' Liz asked.

'You may take it as such if that helps.'

'Very well, but I promise you that I am fine and there is no reason for me not to return to work.'

'Yes, HR has seen your medical report.' Replied Johann. 'I foresee see no problems if that also helps.'

Liz looked suitably reassured. The programme had moved into the final stage after a successful test. We were prepared to manage any chain reaction by turning off the emitter.'

'That is a device to mimic human brain waves.' Said Johann for Mike's benefit.

We found they were necessary to stimulate the level of reactions we required. The first experiment went well as they always do. It is always the subsequent ones where we experience problems. We had embarked on the second test and the number of reactions began to form a chain reaction. I recall feeling dizzy and then everything became a blur, almost as if I were detached from what was going on. I have some vague recollections of Bob trying to talk to me, but then nothing until I woke up when the paramedics had arrived. The doctors think I have some kind of dietary disorder. My blood CO2 count was a little low to start with. I assume that I have been overworking and not eating properly. It has been a stressful few months.'

'I can imagine.'

Mike now realised why he had been invited and decided to go along with Johann's plan.

'Liz.' He paused to ensure that he had her attention. 'When I was staying at the farm last autumn, you and I had a bit of a discussion about your experience in 1973.'

Mike again paused, waiting to see whether Liz would react. She did not.

You were part of a team carrying out some very basic tests on the Noril'sk, and like many others, it had a catastrophic effect on you. Unlike the others, you survived. In fact, of all people affected, you are the only one to fully recover. That makes you unique. What was not unique concerns your experience during the months you spent in St James'. The doctors were most intrigued that both you and John Stewart experienced exactly the same hallucinations. At least they believed they were hallucinations. Of course, your medical records are confidential, but John Stewart is dead and I was able to get hold of his. Based on what I found, I think when you entered that room back in 1973 after finishing the final test of the day, you experienced an overwhelming fear of something you dread most. Didn't you almost drown as a little girl? I also think that for months you experienced that same moment over and over again. Somehow you remained connected to the Noril'sk until you were moved into a new wing. A wing constructed from modern materials rather than traditional stone, brick and mortar. I also think that since the Noril'sk arrived at the farm, you have experienced the same level of... what shall we call them, psychic reactions as Jan. Yesterday, during that final test, a test which we know created a direct connection between the farm and Pandar, I think you were thrown back to that day in 1973 and your mind could not handle it. Is that not what happened?'

Liz gave Mike a look of pure antipathy. 'You really believe in your own cleverness, don't you?'

This was not the response that Mike was expecting and it took him by surprise. It was an uncomfortable reminder of

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what Jan had said in the pub about his liking for games.

'Then please show me that I am wrong.' Mike replied quietly. Liz shook her head. 'I can't.'

She turned around and reached for a box of tissues on her bedside table.

'Give me a moment please.'

Mike and Johann shuffled uncomfortably.

'It is true that I had the same experiences as Jan. But I recognised them for what they were. That is why I think it preferred Jan for a while. Her sense of fear was more intense than mine. Yesterday, I felt that it had returned its attention to me. I assume that was because Jan had been absent for so long. But you are wrong about one thing. It was not being back in that lab with John and Phil that inspired fear but the sense that there was something inherently evil in that room. That is what I experienced.'

'You talk as if it were alive.' Johann looked bemused.

'Yes I do.' Liz replied. 'In fact, I am convinced of it, but there is no evidence. Herr Svensson. You said this was to mutual advantage. Bob and I want these results made public. How can you help me with that?'

'I am not sure that I can. Not without us helping each other, and possibly not even then. I suspect that things have moved beyond that stage. Are you prepared to return to the farm?'

'I insist on it.' Liz replied.

'Then special projects will most certainly also insist that the work is continued and for the moment they must be allowed to have their way.'

'I do not believe this!' Mike exploded. 'What game are you playing now? I thought that you wanted them stopped. You said that continuation would expose people and your company to incalculable danger.'

'I did and I still believe that Mike. In my view, it would be madness to continue, but based on the results they have produced so far, others will not see it that way. Think about it. What they have done appears to push the boundaries of science

forward by decades. Without evidence to the contrary, we simply haven't a hope of stopping it at this stage.'

'So, you are willing to risk the lives of everyone there.'

'I hoped you would think better of me.' Johann replied with a disappointed tone. 'For the moment, I have no power to prevent the experiments. All I can do is to continue what we started. Keep a careful eye on what is happening and wait for the right moment.'

'Then at least you should tell people what is happening within ASRI.'

Johann looked horrified. 'No Mike. On no account can we bring them into our confidence because of Trantor and Baker. The risk of those two finding out is too great.'

Mike did not reply. He had no reply to give. As much as he despised what ASRI was doing, he understood all too well the implications for everyone if the decision-makers felt under threat.

'Very well,' said Liz quietly, 'that seems to be that, but I insist on one thing.'

'And what is that?'

'You find a way of getting rid of Brendon. I do not want him around. The man is a liability.'

'I'm sorry Dr Pierson but no. There can be no special treatment unless you think he is really a threat, but then there will be consequences for him.'

'What sort of consequences?' Liz asked looking alarmed.

'The same as for you all I'm afraid.' Johann replied. 'You all remain valuable for as long as you remain useful. Otherwise, it is not only Dr Prince who could be seen as a liability.'

Liz suddenly looked very troubled and shook her head. 'Then I cannot agree to return.'

Much to Mike's surprise, Johann crossed to the window without a word and looked out over the car park. It was beginning to get dark and a grey day was turning into a wet evening. For several moments, he seemed to stare blankly before his attention returned to the hospital room.

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'There is something I do not understand Dr Pierson. You invited Dr Prince to join you at the farm. Your reports have said that his work is exemplary and yet you have been very critical of his attitude. I am also aware of the efforts you took over this man who could have easily been a substantial security risk. If you dislike him so much, why did you not sack him when you had the chance?'

'Because he is my son.'

There had been a hurried breakfast that morning. As soon as Liz had returned to the farm, she called a meeting for all the science personnel. No one was told the purpose, although some suspected and were happy to share their ideas no matter how farfetched. Liz was the last to arrive. She stood at the front of the long conference table and everyone instantly became quiet in anticipation.

'I am sorry to have been evasive about my reasons for wanting to talk to you all. Those reasons I'm sure will become self-evident. Firstly, I would like to scotch any rumours concerning my health. There was a minor problem caused by stress. I am sure you can understand the reason for that. However, I want to reassure you that I am fine and in full control here. Now, since yesterday morning I have had two meetings and I want to share the outcomes because they directly affect each and every one of you. We have two major issues facing us. The first is that we have stumbled, and I use the word advisedly, across what could be the defining discovery of the 21st century. And I would like to say sorry for not taking time to congratulate you all. I know that Bob fully supports me when I say that it would not have been possible without everyone's contribution. It is however, very early days and indeed we cannot be certain whether it can or indeed should be developed into anything. But that does not take away the value of the science and I have been having discussions with

our science director to try to ensure that you receive full credit.

Again, I choose my words. Whilst the Noril'sk appears to have given us the key to other dimensions, our personal experience of the dangers must make us question whether we can use that key. We have a moral as well as a scientific responsibility and we are here to make a decision on how or whether we should proceed.'

'Director,' Trantor interrupted with a clear warning tone, 'this is not a conversation you should be having.'

Liz looked at him coldly before continuing her address. 'As you can see Mr Trantor and I have a difference of opinion. His concern is to ensure that our discovery remains under the control of the British Government.'

The room exploded with a cacophony of protests and Trantor's face betrayed a rare moment of anger. He stood up to leave but stopped when directly addressed by Liz.

'Mr Trantor. Both Bob and I were aware of the price we might have to pay in order to get permission to continue our work. Any complaints you may have should be directed against us. However, there is one fact of which you should be aware before you leave to make your report, no doubt recommending a full takeover in the national interest. The ASRI board is at this moment meeting the minister to brief him that other governments are just a little way behind us. Any attempt at further interference and we will all refuse to work any further on this project.'

Her statement received a short burst of verbal agreements.

'You are welcome to stay or leave as you desire.'

Trantor sat down with a curiously self-possessed smile and Liz returned her attention to the others.

'The Noril'sk is generating matter that appears to open up a connection. That connection could be to another dimension. If so, then we may have found the long speculated additional realities necessary to explain the weakness of gravity. It is also possible that we have discovered a way to traverse time. We cannot be sure of course and will have to prove it and there lies

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our difficulty. Every time we use the Noril'sk to test the concept, we run into major problems. Problems we must solve before we can continue. Unless anyone disagrees, I think the priority problem is one of control, although Brendon is confident that we may already have a partial solution. Most of us and I include myself, have been affected by a form of energy. We have also experienced two incidents of potential meltdown. Irrespective of the enormity of what we have discovered, unless we can find a way to safely manage the Noril'sk matter, we will have to abandon the programme. As I said a few moments ago, we have two questions facing us. Can we proceed and should we proceed?'

'Brendon, Liz mentioned that you may have a partial solution. Is that right?' Asked Jan.

'I do. Provided we cut the emitter before a power reading of ninety-five, there is insufficient matter coming from wherever, for the process to become self-sustaining. But that still leaves us with the problem of exposure to an unknown form of radiation.'

'We do not know whether it is radiation.' Corrected Bob.

'That is exactly my point. We know that something is having an effect on us. Well, some of us, but we do not know why, how or whether there are any long term issues.'

'But I think only two people seem to have suffered the worst effects.'

'If you mean the most visible ones, then yes Claire, you are right.' Brendon replied. 'But all of us at some time have suffered headaches and feelings of anxiety.'

'All except for Claire.' Added Bob.

'Yes, that is unusual, why just Claire?' Jan mused.

'Mr Trantor,' Liz interrupted, 'have you experienced anything odd since you came here?'

'If you mean any of the symptoms you have discussed, yes. I always have mild head pains when you are running your tests and so has my team to varying degrees.'

'The same goes for me,' Added Alan, 'but only very mild.

So, it appears that Claire may have some kind of immunity. Perhaps Brendon should have thought about encephalographs.'

'That is assuming we continue.' Liz interrupted once more trying to bring the discussion back on track.

'On that subject, I think the main point has been ignored.'

'And what is that Alan?' Brendon responded with an ill-disguised tone of contempt.

'Earlier, you all supported Liz when she raised the idea that you would stop working if the government took control of your programme. Whilst I fully understand your reasons, you should be aware that if we do not continue, it will give them just the opportunity they are looking for. The consequences are obvious. You would lose any control over the direction of your discovery as well as any rightful credits. Not that I am saying that hubris provides any justification for evading the moral aspects of the research. However, whilst we carry on, we can ensure that the experiments are run in accordance with purely scientific ethics and that the risks are maintained at a reasonable level.' He paused for a moment to reflect. 'Look, I know I am the new boy here. But that gives me a certain degree of impartiality as I can make no claims on your discovery. It seems to me that you have a duty to ensure this is made available to the scientific community and the only way you can do that is to ensure you retain control.'

That statement brought the conversation to a halt as people thought about what he had said. It was Brendon who broke the silence, surprising himself more than anyone else in the room.

'Do you know? He is right.'

'I want everyone to wear one of these.'

Brendon entered the control room carrying an armful of contraptions that looked like devices for administering torture. He went around to each person and showed them how to fit

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the devices on their heads. The caps of thin plastic straps included small sucker pads and a long network of wires that hung down the back.

'I will be able to record all of your thought patterns as we carry out the tests. So, you had better watch what you are thinking.' Brendon smiled cheekily. 'They will not show why we are being affected but they will show how.'

'I had some thoughts about that too.' Added Claire. 'Jan and I have set up a range of sensors around the farm and had the Pandar team do the same. They are similar to those used in deep caves to detect neutrino particles travelling through the planet. If whatever it is, is particle based then we should pick it up.'

'Excellent.' Replied Bob. 'In that case, we should hopefully get something out of today's sessions. Now, may I remind you all, that our aim is to track whether the particles are travelling between different dimensions or moving through time. If the latter, then we should see the same particles disappearing and remerging back and forth between their point of origin and the outer limit of the sensors. Are we all agreed?'

Everyone nodded their heads before taking up their respective stations.

Just a moment, where is Mr Baker?' Bob looked puzzled as he realised that Claire was standing alone.

'I have not seen him since the meeting.'

'I think I saw him in the barn.' Added Jan.

'Well, we cannot wait. Claire, I want to know the moment the reactions exceed one thousand.'

'Yes.'

'Then let's get on with it.'

Everyone moved to their assigned places and embarked on a process that had become routine. All expected the first test of the day would pass in an unremarkable way. Such proved the case and culminated with Claire studying her monitors as the first batch of results were processed by the computer systems. But what happened next was neither part of the

routine nor predictable. Without warning, the room went black

No one dared move as sight and sound were stripped away in the sealed basement. Even the noise from the air conditioning quickly fell silent and as minutes passed, the air itself seemed to become immobile, claustrophobic, stifling their ability to breathe. Then the room exploded with shouts and blinding torch-lights further adding to their sense of disorientation, but gradually through the chaos, a single voice began to emerge. The main lights came on and each stood blinking helplessly as they gradually became aware of the presence of soldiers and steel grey guns pointed towards them.

'No sudden movements please. My men have orders to shoot.'

'Mr Gordon?' Asked a young curate as he opened the door at the rear of the bishop's palace.

'It's Jordan actually.'

Mike had received a call from Jan's uncle inviting him to discuss some papers he had found. Jan was not able to get away and so he had arranged to see the bishop on his own. The young curate smiled knowingly.

'I am sorry, of course it is. Please do come in.' He led Mike down the same long corridor he had seen on his first visit but this time he was shown to another room at the rear of the building.

'His Grace asks you to accept his apologies but he has been called away. However, he left this box and said that you would know what to do with it.'

Mike was shown a large wooden box which he opened gingerly. It was full of yellow and very fragile paper.

'Can I get you anything?' The young man enquired.

Mike shook his head. 'No... thank you. I will be fine.'

As the curate left him to his own devices, Mike took the box to a desk and sat down. For a moment, he stared at it as if unsure what to do. So much had changed since Jan and he had been hunting for ghosts in the dusty archives. But it seemed rude not to respond to the old boy's kindness, particularly as he had gone to so much trouble.

Mike began to sift casually through the sundry mix of letters from various times over the past three hundred years. He pondered briefly on why anyone would have put the collection together. Clearly, there must have been a reason, perhaps even a link that was worth investigating. Mike roughly sorted them

into date order. Despite the fact that the earliest ones were difficult to read even when they were written in English, he quickly established that they did indeed have a common theme. Each letter concerned the difficult behaviour of young parishioners who lived in the long since vanished village of Woodville, close to the farmhouse. One was about a girl of fifteen who was caught repeatedly torturing animals. This was put down to possession by evil spirits. He checked the date and found it was 1605. Another concerned a young boy who took to hitting his sister. The letter, dated from the 1840s, recommended the child be sent to a residential school.

As he continued reading, Mike also realised that the dates formed a familiar pattern and he began to look for the names of Ellis, Carrington, Trenchard and Striker. Within a few moments, he found what he was looking for. The box included a small bundle of letters with the name Striker almost obscured by age and decay. He carefully slid off the piece of faded cloth that was holding them together and opened each out as far as he dared. The paper was dry and cracked and the ink faded to an almost invisible brown on the deeply aged paper. He scanned the first few lines of each to separate out those he could read and those he could not. Mike photographed the ones written in Latin with his mobile and put those away. The English ones he assembled in date order and then read through them carefully. It was a lengthy process, in part due to the obscure words and handwriting and in part, because of the extreme age of the letters. Nevertheless, he was slowly able to discern the reason for Roger's call. He then looked for Trenchard and Carrington. He found one about Eliza Trenchard and it soon became clear that this one followed a familiar theme. Both girls had unhappy backgrounds. Lizzie in particular, seemed to have a history, of what would be recognised today as sociopathological behaviour problems. It was only her position as the daughter of the vicar that had saved her from becoming an outcast. Another interesting fact was that the letters quickly tailed off once the main characters

had been removed from the area.

Mike carefully replaced the collection whilst considering another puzzle. Whatever had caused the farm's troubled history had also spread to other local houses. Over time these had been abandoned, eventually leading to the death of the village. Roger had been correct in his assumption that the contents of the box were of significant interest.

As Mike closed the lid of the box, his mobile rang shattering the peace of the last couple of hours. The voice that came through the speaker belonged to Johann and the news sent Mike racing to his car.

Less than two hours later he found himself walking into the reception of ASRI HQ. Johann had left a pass with the security people and he was given rough directions to his destination. It took another ten minutes to find the right office and when he entered the room, a conference was taking place. Mike had no difficulty finding a seat. The large table was easily big enough for twenty or more people, but just four were present and one of those was Johann.

'This is Mike Jordan who was so useful to us last year.' Said Johann. There were no other introductions. 'As I was just saying, late this morning, Duncliffe Manor farm was taken under military control in accordance with a provision of our MoD contract. Our lawyers have confirmed that they have acted within the relevant provisions and for the moment there is nothing we can do to make them withdraw.'

'Is Jan all right?' Mike interrupted urgently.

Johann smiled patiently. 'My apologies, I was forgetting. Everyone is fine. I have been assured by Captain Morton who is in charge, that all the staff are unharmed and well. However, for the moment they are not allowed to leave the farmhouse or to make contact with anyone.'

'Just a moment,' a small thin woman spoke with an Eastern European accent, 'who is this man and why is he here?' She pointed vaguely towards Mike.

Johann's reply was calm but firm. You will have read Mr

Jordan's file. His background should provide sufficient credentials for his presence. However, if you require more, he has the personal endorsement of M. Zidane. Therefore, if you have any difficulties with his presence, I suggest you take the matter up with him.'

Johann waited for a moment to satisfy himself that there were no objections.

'Under the provisions of the contract, the government has the right to quarantine the farm for four weeks whilst an assessment is made as to the level of risk to national security. During that time ASRI loses all effective control over the work carried out there. Should they decide that there is a security risk, we could lose that facility and all rights to any discoveries. We are here to discuss our response.'

'Who called them, that's what I want to know?' Demanded a ruddy-faced Yorkshireman.

'That is not clear,' Johann replied, 'but it seems likely that it was someone from the special projects team. Or rather it was a report from them that was the probable cause. It seems that there was talk within the farm about refusing to continue the work on the Noril'sk. I would suggest that special projects considered that threat sufficient to warrant action.'

'Not in itself,' said the Eastern European woman, 'my information is that there were concerns that the Indians and Chinese are both about to make a breakthrough.'

'Well, whatever the cause, the fact is that it has happened. We are now even further away from resuming control.'

'Can we not put pressure on special projects to withdraw their request? We could ask the board to issue an instruction.' Observed a second man of indeterminate origin.

'The board is not due to meet for another five days and it would be impossible to convene in the meantime. As directors of our respective divisions, we have a responsibility to act on its behalf. Besides which, we all know they have little influence in this area.'

'Then perhaps we need to understand the thinking behind

this. Clearly, they thought there was a risk.' Said the Eastern European woman.

I am unsure about that detail.' Replied the Yorkshireman. I know they have been itching to take over ever since a fragment of the Noril'sk resurfaced and was given to CERN. As we know, since the seventies, all samples have been held by various governments. I'm sure they must have been shitting themselves when they found out that a bunch of civvies had got hold of one. Seems like that bloody bunch of scientists gave them the perfect excuse. Should never have put one in charge, bound to cause trouble.'

Johann looked at the man scornfully. 'That attitude does not help. We have had to work with these government people for many years. There are only two things that interest them. Keeping secrets from foreigners like me and ensuring Britain comes first.'

'Then the only choice is for us to show that the work will progress faster under our control rather than a military one.' Said the Eastern European woman.

'And how do we do that?' Replied the Yorkshireman curtly.

'By offering them something that they cannot get otherwise. Quick access to a high energy accelerator at CERN.' Replied the Eastern European woman. 'Based on our objections, Brussels has so far opposed any move without a thorough test programme first. If we withdraw that objection, it would cut months from the schedule.'

'Are there alternatives?' Asked Johann. No one said a word. 'In that case, this meeting is at an end.'

Mike waited until everyone had left before he tackled Johann.

'Just what do you think you are playing at?' Mike had great difficulty preventing himself from shouting.

Johann looked bemused at the outburst and at first, refused to acknowledge the question until Mike pressed it home.

Look, I'm sorry for losing my temper, but the question stands. You called to tell me that the Army has taken over the

farm. You tell me under no circumstances to contact anyone but to come straight to Cardiff, where I spend five minutes listening to a meeting, which overturns everything you said you were trying to prevent. Please Johann, explain to me what is going on?'

Johann looked at his friend with an expression of sympathy. 'It's politics my friend.' Said a frail French voice.

Mike looked around and saw the stooping figure of Zidane enter the room.

'It has always been about politics and has been since 1973.' Mike sat down in the nearest available chair feeling completely deflated. 'Please, could one of you explain in simple English what the hell you are talking about?'

Zidane walked slowly towards the table and sat down gratefully.

'Ah, well, perhaps it is time.' Zidane began. 'You will recall a company called Cambridge Electronics. When they first tested Noril'sk matter, they found, what other countries had found. It is a powerful hallucinogenic that seems to be able to work across vast distances instantaneously. The military was of course interested. This was the height of the Vietnam and Cold War. But there was a difficulty. The science of the day could not even begin to comprehend the nature of this strange substance and so governments being governments wanted to secure the knowledge. To lock it away until science had developed sufficiently to make use of it. But they faced a dilemma as the cat was already out of the bag as you English say. The Soviets had sent vast amounts to universities across the world before anyone realised just how valuable it was. The Russians had enough common sense to use the furore as an excuse to recall the samples and most, if not all made it home. Those that didn't were retained by various governments and the whole episode was encouraged to disappear from public view. However, this did not mean that it was forgotten. Periodic tests were carried out as and when knowledge increased. Today, three countries are on the verge of

discovering how the Noril'sk works. The first to succeed could find themselves with either a powerful weapon, a source of unlimited energy or looking after a planet of lunatics. Governments and the military mind have a limited capacity for risk assessment and a narrow view of human needs.'

'But you are prepared to let them have what could be the ultimate weapon.' Said Mike disparagingly.

'My friend, new technology has a fleeting reign. The moment you understand how to make something, someone else will find a way to stop it from working. And there are many potential benefits...'

'Please don't bother with that lecture.' Mike interrupted. 'I am really not interested.

'Then let me tell you something that is most definitely of interest to you. On one point the military is correct in their assumptions. Control of the Noril'sk is at most a week, perhaps even just days away. Irrespective of whether that country has good or bad intentions, the current international paranoia could all too easily result in increased acts of terrorism, perhaps even war. The only way to avoid that is to ensure that the international focus remains on the more peaceful aspects of this material. We can play our part to ensure that by publishing our research first. That is why we have invested so much in this programme.

Now, I have yet to explain the point that I think may interest you.'

T'm sorry you feel that way Dr Pierson.' The slim military clad figure of Captain Morton appeared to be genuinely concerned. 'However, the presence of myself and my men need not interfere with your work. We are simply here to protect you.'

'From what?' Liz enquired indignantly. 'Ourselves, I suppose.'

'Not in the least. I do wish you would be reasonable about this.'

Liz looked outraged and Morton knew he had said the wrong thing the moment the words left his lips.

'Reasonable. About what? You come barging into a civilian scientific establishment. A private company, not a government one I might add. You interrupt a vital experiment, which could have had catastrophic consequences. To top it all you threaten my staff with guns.'

'Security you know. All rather a lark, don't you think.' He looked at Liz's thunderous expression. 'You don't think it a lark, pity. I am sorry if we caused alarm. My information was that this facility was in imminent danger.'

'Your information was wrong.' Liz snapped.

'I think we have already agreed that point. It does seem that we have some crossed wires. Now we are here, I hope we can help each other.'

'How?'

'I would suggest that neither of us particularly wants to make this situation worse. My Brigadier was not at all happy for his already scarce resources, to be diluted even further, particularly as there seems to be no justification. Nevertheless, we are here and must remain until our respective command chains sort themselves out. However, as I said we can make the best of it by helping each other.'

Liz regarded the Captain for a moment and concluded that he was being sincere. 'Very well,' she continued in a calmer tone, 'how do you see us helping each other?'

'There are a couple of ways. Firstly, we can both agree on a strategy to convince my command and your bosses that a military presence is not required. Secondly, we can discuss why it happened in the first place. Someone has greatly inconvenienced us both.'

'That I could not disagree with. Since you are obviously more aware of why you are here than I, perhaps you had better start.'

'Why not.' Morton smiled. 'Any chance of a cup of tea?'

Liz looked at him coldly but then decided that it was probably beneficial to reciprocate his attempts at co-operation. She stood up to put the kettle on.

There are of course some details I cannot pass on but in essence, my team provide security for special cases. Usually undefined threats to scientific and other sensitive establishments. My Brigadier received a request from the MoD on the basis that this place was under threat.'

'From what?' Liz asked. 'Do you take milk and sugar?'

'Is that Earl Grey? In that case, neither please. A potential saboteur. I gather you have recently experienced some problems in that area.'

Liz looked bemused. 'It is true that someone tampered with our communications, but that was last year and it was resolved. Do you think that was used as an excuse?'

'It is certainly possible. I take it you are not aware of any current problems?'

'None,' Liz answered truthfully, 'but do you know who contacted the MoD.'

'Yes indeed. A chap called Alan Baker. One of your scientists I understand.'

'So, not Trantor.' Liz mused.

But he only sent in a report. The actual request came from ASRI HQ. French chappie by the name of Zidane.'

'Zidane.' Liz repeated involuntarily. 'Why on earth would he want this place under military control I wonder?'

'Bob, can we have a word in private?' Asked Claire. 'Jan is re-examining the results in the control room. Perhaps we could go there.'

A few minutes later, they both found Jan looking closely at a long print out and she appeared to be very concerned.

'I am glad you are here. Come and look at this.'

Bob picked up the length of paper and studied it. He could see that it was connected to Brendon's encephalograms, but the abstract mixture of different coloured lines meant little to him.

'I'm sorry Jan, what am I looking at?'

These are the printouts from the last test. There is one for each of us. Each line portrays a key function of the brain. The blue one represents the emotion of fight or flight. If you recall, Brendon wanted to find out why only Claire seemed to be immune to the panic attacks. If you look at the beginning of each page you can see two things. Firstly, that the points of activity all start at a reasonably low level. That is as it should be. Then the lines become more pronounced as the test progresses. Again, there is nothing unusual in that, given how tense everyone was. However, if you look at this middle section, you should see two things. The pattern begins to change slightly. The peaks and troughs become more even.'

'So they do. Whose is this?'

'Yours.' Jan replied.

'Now have a look at mine. If you compare the beginning of the trace, it is quite different.'

'And that is what you would expect?' Said Bob.

Jan nodded. What you would not expect is that mine, not only becomes more even at the same time as yours but also...'

'Good grief, they begin to match. How could that happen?'

'It's not just ours, but everyone's and that includes Claire's.'

'Really,' Bob raised his tone in surprise, 'but I thought she showed no reactions.'

'That's what we thought. However, Claire reacts in the same way as we all do except for one reading.'

'Which one is that?'

'The blue one. As you can see, when all the others converge, hers remains unique.'

'Do you have any thoughts on why?'

Possibly, but before I talk about that there is something else I want to discuss. Do you recall that I thought I heard an

unusual sound?'

'Vaguely.' Bob lied.

'I want you to listen to a recording Claire helped me to enhance.'

Bob listened. To his ears, it seemed to consist of very unmusical, soft rhythmic beats but it did have a familiar feel. Claire began to adjust the recording on the computer screen and each time she did so, one level of sound disappeared. Bob shook his head. He could see from both Claire and Jan's faces that he was supposed to recognise something, but the answer remained elusive. Claire adjusted the levels once more and another level was removed. Now the individual beats started to become distinct. He shook his head once more and again Claire removed one of the sounds. Then suddenly, his body flushed with a cold sweat as a possible answer occurred. Claire saw his reaction and smiled sadly as she isolated the final soundtrack. Bob stood stock still, unable to articulate what he was hearing for a moment. It was the sound of a heart beating.

'Are you sure that it is coming from Pandar?'

Jan nodded.

'How many in total?'

'Five.' Jan answered.

'And they were definitely from Pandar. There could not be some sort of mistake?' Bob asked, knowing that he was clutching at straws. 'What happened to them?'

'They stopped.'

'All of them.' Bob's face drained of colour as the full reality began to sink in.

'Yes.' Jan responded quietly. 'The sensors at Pandar recorded exactly the same sounds as ours. There can be no doubt.'

'Five people.' Bob repeated quietly to himself. 'Five... It's hard to take in that anyone could do something like that.'

'And there is another thing.' Jan stopped and pointed at a red line on the printout. 'This is the blood flow through my brain. I have scanned just that line from each of the prints so

that we can compare them.' She tapped her keyboard and a diagram appeared on the large monitor in front of them. 'As the test progresses and as our brain patterns begin to converge, so do our heartbeats. Not only here but also with the beats of the people at Pandar.'

'How is that possible?'

'I think it may be connected with the reason why Claire does not experience any sense of fear.' Jan turned to Claire. 'Why don't you tell him?'

'She does not need to.' Bob interrupted. 'I think I know why, her riding accident.'

Claire nodded and blushed. Jan looked puzzled but decided not to respond.

'A month in a neurological ward followed by two more after I suffered a minor stroke. It is possible that my brain had to compensate for the damaged area and my sense of fear works in a different way. Brendon is the expert. We should discuss this with him.'

'Quite so,' replied Bob, 'but that does not explain why our brain and heart patterns converge.'

'Actually, I think it does.' Jan responded. 'I know this is going to stretch your credulity, but I think that something in the Noril'sk could be trying to control us in some way.'

Jan paused whilst she tried to gauge Bob's reaction, but his face remained impassive.

'You knew.' She said accusingly.

'No.' Bob replied. 'That is too strong a word, but I did suspect. Or to be more accurate, Liz and I suspected.'

Jan threw her arms up in despair. 'Then why did neither of you say anything. Damn it, we are supposed to be a team.'

'I am sorry.' Bob replied sheepishly. 'As you said yourself, the whole idea seemed so far-fetched that we decided not to share it. However, that is not the issue now. Jan, are you absolutely sure that those five people are dead?'

'As sure as I can be. In fact, I can see no other explanation. The sounds stopped over a period of about thirty seconds and

the speed of their hearts at the end almost certainly resulted in heart attacks.'

'So, who were they and why were they there?'

Bob studied Claire for a moment before venturing a suggestion. There is one possible answer as to who they were.'

'The Poznan team.' Added Jan.

Bob nodded.

'We know they were removed from the Poznan site and there were five of them.'

'OK, but that still leaves us with why?' Claire observed.

'I think we have duped ourselves.' Jan took a deep breath as she resigned herself to an obvious conclusion. 'I think we have been guilty of not asking questions when we should have done.'

'Yes, I agree.' Replied Bob sadly. 'Each of us had doubts about how an artificial source could work. Now we know that it did not.'

'If we are right, what do we do?'

Bob looked at Claire with an expression of complete defeat. I really don't know. I do not mind admitting I am scared. I think we are completely out of our depth. Who do we trust? Is this something cooked up by Special Projects Division or something approved by ASRI? We can't even leave here, so there is no way for us to contact the authorities... unless.' Bob stopped and looked at Jan. 'What about that boyfriend of yours?'

'Mike is not my boyfriend.' Jan replied defensively.

'No, of course not, sorry, but he does have a senior level contact at ASRI.'

'Yes.' Jan replied doubtfully but beginning to see what Bob meant. 'But that does not get around the problem of how I can talk to him in private. We cannot leave and our mobiles have been confiscated.'

'Not all of them.' Claire replied with a self-satisfied grin.

'It was I who asked for the military to occupy Duncliffe.' Admitted Zidane in such a matter-of-fact tone that it took Mike a moment to digest the meaning of what he had just said. 'You have nothing to say?'

'To what? Another tissue of lies and deceptions. To be frank M. Zidane, I no longer know whether to believe anything you say.'

Zidane nodded slightly in agreement. I do understand but let me explain my reasons. As Svensson said at the meeting earlier, there are at least three other countries on the verge of discovering how and why the Noril'sk works. The country that succeeds will be able to drive the next generation of military and probably civilian technology. That is why the British defence people insisted on having someone working in the team at Duncliffe.'

'The security chap, Trantor.' Interrupted Mike.

'No my friend, Trantor is a guard, little more. I am talking about Alan Baker. He is the director of the Special Projects Division and an employee of a part of the British Government that works beyond the law. My information was that he was about to take the entire project under his direct control to ensure that if the British cracked the code first, the government would have absolute control over how it was used.

These are not nice people M. Jordan. They are perfectly capable of taking life. As a matter of truth, I have information that they have already done so.'

Mike flinched instinctively but he was not surprised. What evidence is that?'

'I would prefer to keep that to myself for the moment. However, my concern lay with what might happen to the people at Duncliffe. None I am sure could achieve the necessary security clearance, which means that to people like Baker, they are a risk to be managed. I hoped that by engineering a situation where the military took charge, it would make them think twice; and I am happy to say that it appears to have worked. But we still have a problem. Whilst the civilian

and military people have no liking for each other, Baker could overcome any opposition if he can prove a real security threat does exist. That is where you come in.'

Mike was careful to control his expression. This was not a situation in which he could afford to be swept along with other people's plans. There was Jan and the others to consider.

'Go on.'

I am aware that you have a close friendship with Madame Carraway. You must use that influence to ensure their work continues. We need time to ensure the right people understand the risks.'

'We?' Mike quizzed.

'I am a simple businessman. Others have the real influence but that is something else I must keep to myself.'

'I see.' Mike replied. 'How can I influence anyone at the farm? Contact with the outside world has been cut.'

'That is true but they will try to make things normal as soon as they can. You must find a way to ensure that you remain in constant contact with the team at all times. That is crucial my friend as we may have to act very fast to prevent a tragedy.'

Mike decided to stay in the slow lane of the M4. This was a long, straight stretch of his journey which would give him at least half an hour to think and he had a lot to think about. Whatever he did next would not just affect him but also Jan and the others. He already had the distinct feeling that he was in some way responsible for their current predicament.

When Svensson had first approached to ask a favour, he had been eager to accept as it provided some spice to what had been a routine commission. It was also a good reason not to return to London and Lucy. It had all seemed so simple and innocent, a minor deception that would provide a few weeks' diversion. However, it had not proved innocent and Mike was beginning to feel complicit to a very nasty plan. In fact, if it were not for

Jan and the others, he would certainly have walked away. After all, he was a journalist, nothing more.

He began to think about Jan. About what she was doing and how she was feeling. Whether she was worried or taking it all in her stride. Before her illness, Mike would have had few concerns about the independently minded scientist he met on his arrival at the farm. However, her breakdown had left her vulnerable even if she did her best to hide it.

His meeting with Johann and Zidane had left him feeling very angry, but it had also answered many questions about why an out-of-the-way Dorset farm had been chosen as a location for such important work. The answer proved to be both obvious and simple. It was easy to monitor and even easier to secure. He also understood why there were no serious efforts to end the experiments when there was such unambiguous evidence of danger. Clearly, it had all formed part of a well contrived plan. Now he had been asked to ensure that the plan continued. Despite everything, he knew about them. Despite the pleading of his conscience warning that they should be stopped, he had to make sure nothing prevented their plan reaching a conclusion. The price for failure did not bear thinking about.

Since he left Cardiff, Mike had been trying to think of a way to contact Jan without endangering her. Zidane had said that the security precautions would be lifted. But how long would that take? More importantly, how long would Baker wait? That was another thought. Did anyone at the farm know just who their new colleagues were? Jan had expressed doubts about Trantor, but it was now clear that her suspicions had been directed at the wrong target.

From deep in thought, Mike gradually realised that his mobile was ringing. He glanced quickly down at where it lay on the passenger seat. It was not a number he recognised, but some instinct told him to answer it. Mike carefully checked all around the car for the police and cameras before picking it up.

'Hello.' He said cautiously. 'Jan, are you OK? Yes, I

know...Look, I can't talk now I'm driving but be patient, we should be able to talk properly soon.'

He put the phone back on to the seat and for the rest of the journey, he could not help looking at it occasionally and smiling.

Zidane had proved as good as his word. By the time he arrived at the Oak, Jan was waiting in the bar. As soon as discretion allowed, they both went to his room and the moment the door closed Mike tried to give her a hug, but she felt unresponsive.

'Thank goodness you are all right. I was out of my mind.'

'Thank you.' Jan smiled weakly. 'Mike, I really need your help. We need your help.' She quickly added.

Mike felt a little puzzled by her reaction but decided not to show it.

'In that case, I think we need to do two things. Have a stiff drink and then talk.'

He opened his dresser drawer and took out a bottle of whisky. He poured them both a good measure and then took the glasses over to the settee. Jan took the glass and proceeded to drain about half in one gulp.

'You needed that.' Mike observed admiringly.

'And how.' Jan replied. 'First things first, do you know what has happened?'

'Yes, if you mean about the Army taking over. Are they still there?'

'There is a man called Captain Morton, but the others have left.'

'And how are they treating everyone?'

'Surprisingly well, in fact Liz has become quite chummy with Morton.'

'What about the two new people Trantor and Baker. Are they still there?'

'Trantor is of course, but then he would be. No one has seen Baker since this morning, but again that is no surprise since Liz said that he was responsible for what happened.'

Mike decided not to correct her. In a way, she was right. Baker was responsible. Jan fell silent for a moment and looked as though she was trying to compose what she would say next.

'Mike. Everyone is scared.'

'I'm not surprised.'

'No, I don't think you understand. It has nothing to do with the military.' Jan paused for a moment as she tried to settle herself. 'I do not know how to tell you this but at least five people have been killed.'

'Not at the farm!' Mike blurted in horror.

'No, at Pandar Station. That's the one in Southern Brazil.'

Mike sat back on the sofa. A sense of instant relief swept over him, followed by instant guilt at the thought that he could be relieved that no one he knew was dead.

'How did it happen?' Mike asked.

'I don't know... We can't be sure. We think that Alan's idea of creating artificial brain waves was a lie, although I suppose it's possible, he intended the idea to work, but it didn't and so they used people. We did think it was the team that messed up at Poznan but one of them turned up at CERN. It now seems more likely they were locals. The thing is, they must have done the same thing at Poznan. We could not have got any results if they hadn't. We only found out about Pandar because they placed the people too close to one of the microphones used to gauge the accelerator. The point is that they must be aware that we know. That's why everyone is scared. They want to get out.'

Once more Mike looked horrified. Jan, you and they cannot leave. If you stop the work, there will be nothing to prevent these people from taking over and each of you knows far too much.'

Jan dropped her head and stared forlornly into her empty glass. 'I know. We have all been going round and round in circles. In part, that's why I am here. We have no idea what is going on, who we can trust or what to do next. We are all banking on you.'

'Because of my connection with Johann?' Mike replied

hoping that that was not the only reason.

'That's right. Even Bob wants out and he was responsible for pressing for the work to continue. We are simply scientists. We just want it to end with our skins intact.'

Mike looked at Jan for a long while. Her hunched pathetic form was so unlike the confident woman he had met all those months ago, that all he wanted to do was take her away. But that was the one thing he could not do. In truth, the only constructive thing he could do for her and the others, was to give them with hope, even if that hope proved to be false.

He quickly came to the decision that the best source of hope was to provide them with something familiar to occupy their minds.

'Jan, how far away are you from defining the properties of the Noril'sk and how it works?'

'Sorry. I do not understand the relevance.'

'It's a question of timing.' Mike replied. If Baker thinks you are on the verge of a breakthrough, he is likely to wait and see how things work out. And from our point of view, we will know how much time we have to plan how to get you all out safely.'

'Oh I see!' Jan's face almost broke into a smile as she started to think about an area with which she felt safe. 'I don't know where to start. It's all such a mess.'

Mike looked at her sympathetically. Why not try the caterpillar approach.' He said coyly.

Jan responded with a blank look.

'From Alice in Wonderland, you start at the beginning and when you have finished, stop.'

Jan smiled once more. It was nice to see her smiling again.

'We now have a good working knowledge of the properties of the Noril'sk. When subjected to high velocity impacts it generates sub-atomic particles, which are able to move out of our normal three-dimensional space. We are almost certain that they somehow open a window to other dimensions because we are seeing traces moving four dimensionally.'

'And what does that mean?'

Bob is the expert in this field, not me, but according to Einstein, space-time is folded. A bit like a crumpled piece of paper with normal space on one side and us as microbes on its surface. We do not notice the folds because we can only see and move on the side of the paper in which we exist.

What these particles do is take a shortcut through the folds. Sometimes they emerge in a different physical space, ie on the other side of the paper, and sometimes in a different time. It seems that is the way the radiation travels vast distances. Testing the Noril'sk in Poland and Brazil had the same results as if we had tested it in our own accelerator. We have also discovered that the particles not only affect brain patterns but also the heart and possibly other metabolic activities.'

'Any ideas how it does that?'

Jan shook her head. 'Not one, but I think I can explain why Claire was not affected or at least appeared not to be affected.'

'Really!' Mike replied whilst reaching for his case to retrieve something.

It turns out she is not immune just cushioned from the effects. The radiation acts on the part of the brain that processes fight or flight reactions. To be specific it stimulates fear. Not only that but when I took a second look at the cardiograms Brendon made, I found that not only did heart rates converge but each one went very slightly out of sync. That is why everyone experienced headaches and panic attacks. The body registered a physiological problem, even if only at a subconscious level. Claire suffered a head injury in her late teens which means that she processes fear in a different way.'

'But why would it want to stimulate fear centres?'

'Well, that implies conscious thought and it is more likely to be a symptom rather than a deliberate action. Although Bob and Liz both seemed to think that the Noril'sk displays lifelike properties. Even so, it could be a simple reaction, like a nettle rash. After all, no human has worked with these types of particles. We have no idea what is normal.'

'I take your point.' Mike responded. 'Is there any more?'

'No, at least not from a science perspective.'

'And what about from a non-science perspective.'

'I can't help feeling responsible for what happened to those poor people. We all had doubts about the viability of creating an artificial emitter and did not question how it might work.'

'I think you are taking too much on yourself. From what you tell me, Bob was very clear that no one could be present when the tests were carried out.'

'Yes, that's true.' Jan sounded doubtful. 'But we cannot simply ignore what happened, yet neither can we go to the police without placing our own lives in danger. I can't help feeling for their poor families.'

I do understand. Mike tried to sound reassuring, although his main concern was to prevent any misplaced heroics. I was so engrossed in enjoying myself. I ignored my own fears even though I suspected how potentially dangerous your experiments were. I even tried in a half-hearted way to warn you all.'

'At the first presentation, I remember.' Jan interrupted.

'Exactly, yet for all that, I happily passed on how your work was progressing.'

Again, Jan looked puzzled.

'A story for another time.' Mike had no wish to go into the details of his relationship with ASRI. 'So, Claire helped you analyse the sound?'

'That's right and I was very surprised. It is quite a technically complex thing to access the source code. I had no idea she had such in-depth knowledge of computer systems.'

'Neither did I.' Mike broke off as his thoughts pondered a new direction.

'The question,' Jan began, 'is what do we do now? Even if everyone is prepared to continue with the programme, I don't see how we can. We would have to use our accelerator as the others are now out of commission. Distance may not be a cure for the problem but it does provide a cushion. So far, the

effects have not been nearly so bad.'

'Yes, I agree and I would guess that they will be thinking the same. Particularly as distance is a potential selling point. The question for them is, what is a sensible level of risk?'

'No Mike, I can't go through that again.'

'No you can't and that might give us the leverage we need to get you and the others out of there.'

'I'm sorry but I do not understand.'

'Well, no one else has suffered more than mild symptoms, at least not until several hours afterwards. If you and the others can persuade them that it is essential for the place to be evacuated after the tests, it would provide you all with an escape route if required.'

'It might, but I can't see them agreeing. Not now. Not unless we come up with a very credible reason.'

'But that's just it. The time lag does provide a credible reason. After all, if you are that close to solving the riddle, they are unlikely to want to risk losing your knowledge at such a critical stage. I think they will bank on your loyalty to each other to ensure everyone remains nice and obedient.'

Jan became quiet and her eyes fixed on some indefinable point as if she were deep in thought. Mike waited patiently, assuming that Jan needed time to come to terms with what he was proposing.

'I wonder why there is a time lag?'

It took Mike a moment or two to register such a dramatic change in the direction of their discussion.

'I don't know... possibly because your experiments only use minute amounts of the Noril'sk unlike those in the seventies when they would have been using quite large quantities.'

'Mike, I think you have cracked it. All the peculiar incidents have always taken place in the middle of the night.'

'Have they?'

'You know they have.' Jan protested with a look of annoyance. 'Firstly, there was your picture, then my ghost and recently we have seen particle traces when the accelerator has

been closed down. We knew we were creating windows into other dimensions. We also knew that the matter and energy exchange between those dimensions can become self-sustaining. Bob thinks that it could be due to gravity equalising.'

Because quantum theory needs to explain why gravity is so weak compared to other forces, and it theorises that it is spread thinly between multiple dimensions.'

Yes. Now supposing it takes time to travel between all of those dimensions, a bit like having to open up a series of doors before creating a through-draft. That could explain why it was always late at night before we felt the full effect.'

It is certainly possible and yes it could provide the perfect reason for everyone to leave at night. Look, Harry has been on at me for some time now to rent a cottage on the high street. It was not worth it just for me but the rent's not bad and the place looks quite nice. We could move in together. You can then keep me up to date with what is going on and I can ensure that the ASRI board and if necessary, the authorities know what special projects is up to.'

Jan gave Mike a sad look and shook her head.

'I'm sorry but I can't. It wouldn't be fair on you.'

'Because you have realised that you cannot return my feelings. Yes, I suspected that for some time.'

'I am sorry.'

Mike tried to put on a brave face. There's no need to be sorry. Really, it's just how things work out sometimes. But now we have to deal with a serious situation, and we cannot afford to let personal feelings get in the way. We both have responsibilities.'

'I suppose so, but don't you think it is more likely that they will want to keep us all together.'

'That is a possibility,' Mike replied thoughtfully, 'but I am guessing they will try to make things appear as normal as possible to gain your confidence. If you all requested the same thing, they might just agree.'

Jan continued to look doubtful.

'It's a two-bedroom cottage.' Mike said tentatively.

'I suppose you are right. As long as we understand each other. I do care for you, you know.'

'I know.' He looked at his watch. 'You had better be getting back. Give me a call tonight if you can.'

Mike remained seated as he watched Jan close the door. He waited for a moment before going to the window and watching her drive into the night. He then went to the sink and soaked a flannel in cold water which he dabbed on to his eyes. Suddenly the events of the day caught up with him and he felt exhausted. As thoughts of sleep led him to look at his bed and a dressing gown that lay across an armchair, he recalled their one night together and feelings of anger overwhelmed him.

Alan Baker sat on a very uncomfortable chair in a corridor of the ASRI HQ. He had been sitting for some time and there seemed to be no sign of the meeting he had been summoned to attend, actually getting underway. He looked at his watch and groaned. He had been here for over two hours and was not accustomed to being kept waiting. As the director of special projects, he was used to being accorded a certain status. Not that he was status conscious. His military background had given him a healthy respect for the command chain, but his type of work meant that he regularly came into contact with people whose status was not high, but whose importance certainly was.

He knew of course why he was here, what would be said and the likely outcome. However, he was dealing with civilians who would need to be guided step by step through a process, which they had initiated, but he would have to finish. That was part of his job.

Alan stood up to stretch his legs before crossing the corridor to a water dispenser. He filled a plastic cup and returned to his seat to continue waiting. Another fifteen minutes passed before

a door opened and an unsmiling faced beckoned him to enter the room. It was a large conference room, well-lit but with no windows. At the far end sat a small and stooped figure.

'Well, well Mr Baker. You do seem to have made a mess of things.'

'Is that a question or a statement?' Alan replied.

The figure said nothing for a moment whilst it seemed to be thinking how to respond.

'The English sense of humour is a concept I find hard to understand Mr Baker, but I do understand failure and how to deal with it. Unlike my colleagues, I fully appreciate the relationship between the private and public sector. To work, it has to deliver mutual benefits. We both have responsibilities and accountabilities. I know mine but do you know yours?'

'May I ask where this is leading?'

That is the first sensible thing you have said since you walked into this room. It is leading to us agreeing a plan for extricating both our interests from the mire of your creation. I have no doubt you are wondering how I can encourage you to participate?'

'Actually, the thought had not occurred but now you mention it.'

'For that, I suggest we wait. It should not take long.'

The figure fell silent and for the first time, Alan had the suspicion that he was about to be outmanoeuvred. Less than a minute passed before there was a sharp ping from his mobile. It was not welcome news.

'Ah!' Observed the figure. 'I see that we can proceed. Would you like a moment to think about the situation?'

'No indeed.' Alan responded blandly. 'I came quite prepared for this outcome. My best guess is that they are between five and seven days ahead of the competition. That is a very narrow lead. The key missing factors seem to be a lack of understanding of the nature of the radiation and why it affects some areas and people, but not others.'

'What can be done to bridge that knowledge gap?'

'I do not believe that any action is necessary. Prince has already conducted a number of tests, which should provide those answers. They just require time without distraction to analyse their findings.'

'Which you have failed to provide so far. If I did not know your paymasters better, I would see it as a diversionary tactic.'

Alan thought for a moment. 'Yes, I can see that. The key problem is that they are aware of our own tests. It was a foreseen problem, but irritating nevertheless. If you have played your part, any concerns about continuing should now be corralled. I can provide direction. Not directly of course. Now that they know who I am, I must remain firmly out of the picture.'

'You have a trusted ally?'

'Trust is not required. What is required is a mixture of curiosity and self-preservation.'

'A good point.'

'For the moment, I think a degree of latitude is needed. That together with the fact that two of the team have a vested interest in the success of this project.'

'Dr Stanton, pity. The least we can do is to ensure that he receives full credit.'

Posthumously of course, but as you say, a great pity. The knowledge that we used collateral to prove the power of the Noril'sk on the human mind will certainly emerge at some point.'

'That cannot be allowed to happen. That is your responsibility.'

'Of course.' Alan acknowledged. 'It is why I remain useful.' 'Indeed my friend and I suggest you keep it that way.'

Mike sat down in front of his new laptop. It was not something that he would have considered buying in the normal course of affairs, but these were not normal times and he needed something a little more reliable than his old and increasingly erratic machine. This was his first venture into the wireless world and he had been forced to seek the aid of Harry's twelve year old daughter to show him how to set it up. It was not that he was a technophobe, simply that he had not previously seen the point.

It was a sunny morning but being mid-spring, there was a sharp nip in the air. He pulled up the collar of his jacket against the wind that whistled through the exposed pub garden. The wonders of wireless could apparently travel around the globe but was unable to make it through the thick stone walls of the pub. He had therefore been forced to take his new laptop and a steaming mug of hot chocolate, outside.

Mike watched a small white circle spin slowly a few times before a video conferencing window popped up. He inserted some details given to him by Harry's daughter and pressed a green button. It began to make a vaguely alarming clicking noise, but then the face of Johann appeared. Mike sipped his hot chocolate and tried to prepare himself for a difficult conversation.

'Johann. Thank you for sparing me some time.'

'I was a little surprised my friend. You always said that a telephone was quite sufficient to talk to someone.'

'I did, but I think this is best done face to face and a laptop is cheaper than travelling to Sweden.'

What is this about?'

'There is no way to put this gently and so apologies in advance for any offence I may cause, but we have been friends for long enough to be perfectly candid with each other. I believe it is well past time for some honesty from you.'

'Have we not already had this conversation?'

'Not this particular one, no.' Mike's response contained an edge of anger that even took him by surprise. I have done as you asked. The experiments will continue and they are very close to the answers you require. The question is, what are the answers you require?'

'Mike, you really must be more clear about what you mean.' Mike stared at the small square image on the screen. It was difficult to gauge Johann's expression from the fuzzy picture, but his voice contained clear overtones of guilt.

'First things first, I want to know about the deaths at Pandar. I cannot believe that someone like you would have such a casual disregard for human life, which means that there must be some other reason. I certainly hope so.' Mike found his mouth drying out. This was proving harder than he had anticipated. 'Look, I appreciate that you have some loyalty to ASRI, but I need to know what is going on.'

Johann's face remained impassive and Mike found it mildly disconcerting that his eyes seemed to be fixed on a point below where they should have been.

'I'm sorry Mike. I cannot give you that information.'

Mike was not surprised that his first attempt had failed and was fully prepared to press the point home.

There are five people at Duncliffe Manor who are concerned about something more important than corporate ambition. They are worried about their personal welfare. Actually, they are scared witless. Not only were they held under arrest by the Army, but they are now also fully aware of who Alan Baker is and that you have involved them in the killing of five people. Do you not think that you have at least some responsibility for what is going on?'

Even though he was seeing a poor quality image of Johann's

face, Mike could tell that his expression had become uncertain.

'What do you believe happened at Pandar?' Johann questioned quietly.

'It is not what I believe that counts but what they believe. They believe that Baker used people as guinea pigs because he could not get his emitter to work.'

There was a short pause before the reply came.

'I have been given assurances that the deaths were accidental. A team of technicians ignored instructions to clear the site.'

'And you believe that?' Mike asked incredulously.

Again, there was a pause.

'Should I not?'

This time it was Mike's turn to take a short pause before responding as he tried to work out if Johann genuinely believed what he was saying. In the end, he opted simply to test the idea logically.

Then let's explore that claim. Baker knew that Noril'sk radiation can only act in the presence of beta waves. He claimed to be able to create a device that would mimic those energy waves. But we now know that either the idea could not work or did not work. The team then saw three sets of experiments producing strong results. If we accept that Pandar was an accident, what happened on the other two occasions?'

'Are you seriously suggesting that ASRI has been using people in such a callous manner? That is not possible.'

'Is it not?' Mike enquired. 'Then I would be interested in any other explanation you have to offer.'

There was another pause.

'Very well, as you give me no choice. You are quite wrong about the validity of the transmitter idea, but because other countries are not far behind in their research, there was concern about wasting time perfecting the concept. So, they used Bonobos. As a species, they most closely match human reaction to fear. Poland is an EU country. I should not need to say more.'

'I see.' Mike replied. This answer had taken him by complete surprise. 'And is this something they told you or can you verify it yourself?'

'Mike, the illegal use of animals for experiments attracts a hefty sentence. I have no intention of doing any such thing.'

'I take your point.' Mike replied. 'Then let me ask you a different question. Just how close is ASRI's relationship with the government. Are you actually working to the same goals? In fact, is ASRI simply a government front?'

'I have already said all that I am prepared to say, and I would like to ask a question of my own. Why are you interested? I hope this is not for an article.'

'I am interested because my friends are trapped by the demands of ASRI and this special projects bunch of idiots. I am interested because the only kind of consideration I have seen so far, is to what extent they can be pushed and manipulated for other people's ends. I appreciate that someone like Baker's mob has scant regard for people other than as a disposable commodity, but I expected more from you.'

'I appreciate your concerns but there is nothing I can do.' Johann replied coldly.

Mike had been expecting this reaction but had hoped that his next move would not prove necessary. It was with a sense of sadness that played out his final gambit.

'Johann, I am truly sorry you said that, and I wish there was another way, but you leave me no choice.'

'I hope you are not about to try to threaten me.'

'Not in the least.' Mike replied. 'I simply want to appeal to your conscience. You have been married to Linda for four years now.'

'I have.' Johann replied cautiously wondering where the conversation was going.

'You have two gorgeous daughters. You have told me many times how much your family means to you.'

'Mike, please get to the point.'

'My point is this. You would do anything for them, especially

when it comes to keeping them safe. I am in love with Jan as much as you are with Linda. She means more to me than anyone else and I will not stand by and see her harmed. Am I making myself clear?'

'Yes Mike. You are.'

There was a long pause before Mike lost his patience.

'Johann, please talk to me?'

'Just a moment.'

Johann disappeared in a flurry of blurred lines and Mike heard the sound of a door closing. A moment later he was back sitting close to the camera, his face filling the screen.

'In the mid-1970s, ASRI began an acquisition programme. Some of those companies were involved in the original Soviet Noril'sk project and had kept the results from their early experiments. As we started to collate those results, we realised just how strange and valuable that meteorite was. But there was an unsolvable problem in taking the research further. As far as we knew only the Soviet and US governments had access to the Noril'sk itself. Although we later learned that the British Government had also kept a sample. As an alternative, we surmised that a large part of the meteorite must have broken up in the atmosphere and ASRI bought a number of different types of mines to explore whether we could locate the residue and refine it. But the quantities were too small and buried too deep to be economically viable. Of course, none of us trusted each other and so we reached a stalemate. We had the research and the governments had the samples, neither of which was any use without the other.

Then CERN received a sample. No one has any idea where it came from but it upset the balance. ASRI has the contract for CERN benchmark research which meant that we now had access to both. Naturally, Russia and the US put pressure on the British Government to share the research, but they also wanted the knowledge kept secret. That is where special projects come in because Zidane wants everything in the public domain as it will guarantee huge revenue streams.

At first, it seemed likely that we could cooperate. Any military uses would belong to the governments whilst the pure scientific knowledge would belong to us. That is why we were able to start work at Duncliffe. We chose the farm because it was small and anonymous. Exactly the kind of place you would expect to carry out nothing more exciting than routine tests. Then we realised that there was an information leak. Any heavy-handed security investigations could have aroused suspicion, which is where you came into the picture. Then unfortunately, things started to fall apart. The US accused us of ineptitude for not keeping them informed. The Russians wanted to move everything to one of their facilities, which of course the Americans and the British opposed. It was only when it was realised that the Chinese and the Indians also had samples from somewhere, and were on the verge of a breakthrough, that an uneasy truce was arranged. That is where we are now.'

Mike sat quietly through the lengthy account trying to gauge any underlying meanings. But there did not seem to be any, just the usual pointless politics.

'Johann. Are you saying that this whole sorry saga is the result of nothing more than industrial rivalry? I find that hard to believe.'

'You prefer a more fanciful explanation. I wish I could oblige but the grubby reality is this about money and power. It was never about anything else. That is the real world, my friend. But you should take comfort in that because when it comes to success or failure, interest moves swiftly on. I hope that helps.'

Mike took in a deep breath and breathed a sigh of relief. 'Far more than I think you realise. Thank you.'

^{&#}x27;Are you sure?' Asked Bob nervously.

^{&#}x27;I have told you everything that Mike relayed to me.'

^{&#}x27;And he believes them?' Added Brendon.

'Yes, at least as far as the underlying reasons. I do not think he trusts them per se.'

'Who would?' Replied Brendon coldly.

'The point is, the sooner we give them what they want, the sooner we can get on with our lives. At least we know that those poor people who died was the result of an accident.'

'Do we?' Questioned Brendon.'

'Of course we do.' Claire interjected, clearly impatient at Brendon's prevarication. 'Jan just said so, didn't she?'

'Jan simply relayed what she was told. That isn't proof. I don't know about you lot, but I would not trust Baker beyond spitting distance.'

'As usual Brendon, your contributions are less than helpful.' Liz replied wearily. 'There is an obvious way to verify their claims. Simply compare the brainwave records. Even though ape fear patterns may be a close match, they will not be exact and we can draw on examples of Bonobo scans from the library.'

Brendon looked guilty that he had not thought of such a simple point.

'People,' Liz began, 'given the circumstances, I suggest we move back to the subject in hand. It seems that we are in a race to show how the Noril'sk can be controlled.'

'I know I am just the support,' said Claire, 'but I think we have missed something more important.'

'Claire, your opinion is as valid as anyone else's. What is it that you think we have missed?' Answered Liz.

'It's just that we still do not really understand what the Noril'sk is and we need to know in order to understand how it works. For example, we know that the substance increases its mass after extensive bombardments and shrinks again once it is left alone for any period of time. It also produces methane without the presence of carbon. It reacts to human beta waves and seems to home in on certain people.'

'Are you intimating that we could be dealing with a sentient life form?' Brendon looked unconvinced.

Claire's face flushed. 'No, of course not, but both Bob and Liz thought that it might be alive in some way.'

'Really?' Brendon replied looking at the pair in surprise. Where did that come from?'

'It was an idea, nothing more.' Replied Liz dismissively. 'Something based on my own experience.'

'Then why don't we start working as a team and pooling ideas.' Interrupted Jan.

For a moment, Liz looked as if she was about to explode but then seemed to change her mind.

'Quite right Jan and I apologise to everyone. I have been too focused on my own needs and not that of the team.' Liz looked directly at Bob. 'Do you want to want to begin?'

Bob shrugged his shoulders which she took as a sign for her to lead.

'We took the five life signs as a base. Does it feed? Possibly, it seems to need beta waves to react and the more it gets the more active it becomes. Does it grow as a result? It increases in mass when exposed to beta waves and shrinks when it isn't. Does it reproduce? That one is difficult to answer. Does it interact with its surroundings? Most definitely. Does it excrete? I think yes, in the form of methane and for good measure, we added one more criterion. Can it evolve? I am not sure.'

'But how could we prove this idea?'

'In the normal way, Claire. You take a fixed sample; give it the materials it needs. If it reproduces you have life.'

'Not necessarily.' Jan interrupted. 'Crystals will grow given the right conditions but they are not alive.'

'Perhaps the Noril'sk isn't, at least not in any normal carbon manner.' Added Brendon.

Everyone looked at him expectantly and he inexplicably felt self-conscious.

We were discussing sentience but that is unlikely, most life forms are far simpler. The simplest form of self-contained life is bacteria. They have a cellular wall containing DNA, which is the replicating information. They can reproduce sexually or

asexually. They can live individually or in colonies and most importantly, they exist as an independent life form. The next step down from that is the virus. Essentially it is a package of instructions. It needs a host cell to reproduce, manipulating the cell's genetic code to produce more of the virus. It has no independent existence, but it does carry its own replication code, which is the prerequisite for a life form. As Jan said, some crystals behave in a similar way to very primitive life but the difference is that they cannot self-replicate. In other words, they cannot seek out the right conditions to grow or reproduce.

Now, a key step in the creation of life happened when a purely chemical chain somehow gained the ability to build copies of itself. We call this RNA and it is present in all cells.'

'I'm getting goose bumps.' Interrupted Claire, simply voicing what the others were thinking.

'Is it possible,' added Jan, 'that the Noril'sk contains a chemical chain that can not only reproduce itself, but actually seek out any additional chemicals it needs?'

'Possibly, yes.' Answered Brendon. 'People have been speculating for many years, that life on earth was seeded from space, perhaps from a comet or even a meteorite.'

Bob looked doubtful as the direction of their conversation moved ever further away from his theories.

'I'm not so sure about this.' He said. 'The Noril'sk is the key to understanding Einstein and Plank. We already have enough to do without also trying to establish the definitive proof for Darwin.'

But Brendon had become very animated as the new possibilities expanded into his territory. I think we are on to something which can help us understand how the Noril'sk works. And you have admitted that you cannot develop your own research until we do.'

Bob nodded reluctantly.

'So, why don't we develop the idea? Supposing it does contain some kind of self-replicating ability, then we would not be looking for life but a pre-life form.'

'And what would the criteria be for that?' Asked Liz.

'Essentially the basic genetic markers which are Cytosine, Uracyl or Thymine, Guanine and Adenine or perhaps just the right mix of chemicals including nitrogen, hydrogen and oxygen.'

Well, we know from the chemical analysis that it contains those elements.' Claire interrupted. 'But there are certainly no nucleotides or their base compounds. As you know life is based on DNA and DNA contains nucleotides and one of those must contain at least three of the genetic markers. No markers. No life.'

'Unless of course, it is seeking out the right conditions to create its own version of DNA. It produced methane which comprises one carbon and four hydrogen atoms. The carbon must be coming from somewhere. Perhaps it is a by-product of creating its own genetic markers.'

'Which brings us firmly back to the original point,' said Liz trying to rescue the conversation, 'how do we test it without endangering ourselves.'

'The answer to that is simple. We do not need to test it. Just look through past results. We have records of all the chemical changes to the Noril'sk for every test. We just have to go through them.' Claire smiled smugly to herself.

'Could I speak to John Weathers?' Asked Mike as he ticked off another name on a long list of phone calls he had to make. A few moments later, a voice he recognised made itself known.

'Is this Mike Jordan?'

'Yes John, it is. Do you have any results for me?'

'I do, but it would be a lot easier if I knew what they were for.'

'I am sorry about that, but I am not sure myself.'

'This is highly irregular. I know ASRI own the building but all this cloak and dagger stuff is not really my thing.'

'As I said, I am sorry about that, but I can assure you that there are good reasons.'

'So some Swedish chap explained. 'I do have your assurance that this is not for publication.'

'You have my word. This is strictly private and strictly above board. You received a copy of the property deed.'

'I did, otherwise we would not be having this conversation. I suppose you would like the results now.'

That was the general idea thought Mike but limited himself to saying nothing more controversial than please.

'There are three main types of construction material used to build the walls. Of course, I only tested the oldest part of the structure dating back to the 17th century, although the actual foundations are much older.'

Mike struggled to remain patent. If am only interested in that time frame.'

'The stone blocks are a common type of sandstone found in Dorset. Not very old in geological terms, certainly less than 200 million years. The plaster is a combination of an older lime based type and a 20th century mix. Looks like someone carried out some major repair work. The lime plaster is also local, possibly dating back to 200 to 250 million years. However, the mortar is a different story. Very unusual.'

'How do mean usual?' Mike interrupted.

'To start with the base lime element is much older. Possibly as much as six hundred million years. And as I was saying, it has some very unusual properties. There are high levels of nitrogen, hydrogen and phosphates and they seem to be bound into peculiar molecules. In fact, they were so odd, I sent them off for a more detailed analysis.'

'To whom? This is supposed to be confidential.'

'There is no need to worry. I sent it with a batch of soil tests for a construction project, to our facility in Southampton. Anyway, according to them, the lime is polluted with organic traces.'

'What kind of organic traces?'

'The mortar has some very unusual properties and they were not able to quantify its elements, so they sent it to Southampton University for spectro analysis.'

Mike groaned inwardly. What was supposed to be a covert exercise, now seemed to be spreading inexorably throughout the entire testing network in the home counties.

'And what did they come up with.' Mike asked keeping his fingers crossed.

T'm afraid I cannot answer that. They had to call off the tests. Some of the students became ill and the Health & Safety people were called in.'

Mike braced himself for bad news.

'Luckily for both of us, they concluded that it was nothing to do with the sample I sent, just coincidence.'

'How so?'

'The students complained of an odd smell and then started to experience headaches. One even suffered a mild panic attack. But the health people believed that the samples were simply too small to be the cause of the problem. Nevertheless, they closed the university labs as a precaution.

'I am glad to hear it.' Said Mike relieved that the material had not been sent for yet further testing. 'So, what are your conclusions?

'I would say that in your position I would be very concerned.'

'About what exactly?'

'If a small sample caused the symptoms suffered by the students, given the volume of lime mortar used in a building the size of your farm, god knows what effect might be.'

Jan rubbed her eyes as yet another graph popped up on the large screen. She heard a soft sigh from Brendon who was sitting beside her and knew exactly how he felt. They had been looking at coloured graphs for five hours as they ploughed their

way through several months' worth of results. Jan suspected that it was harder for her as she only had a vague idea of what they were looking for. Brendon was the expert.

Things had begun well enough. They quickly found the chemical signatures of nitrogen, oxygen and hydrogen they were searching for. But that was the easy step. Now they were looking for them in the right quantities and in the correct chains that would identify the presence of nucleotides. It was those that could signify the presence of life, if of course it was there and if it followed the same patterns found on Earth. As everyone agreed, there could be all sorts of life in a place as big as the universe.

Brendon had explained that they were searching for a spike at a particular point of the graph for each of the four parts of DNA. In reality, it was five, as RNA, which was also crucial to life, had an additional chemical signature. One of the problems they were now encountering was that every experiment had generated thousands of readings since they had begun testing the Noril'sk last autumn. These had to be checked one at a time, which could potentially take weeks. They did not have weeks.

Jan smiled vaguely to herself. Was it just months since they had received the commission? So much had happened that it seemed far longer. She found herself thinking about Mike. The connection for her jumping thoughts was that he had arrived more or less at the same time as the Noril'sk. Despite her initial misgivings, she had been pleasantly surprised by the pictures Mike had emailed of the cottage and was beginning to look forward to moving out of the increasingly claustrophobic farmhouse. Mike had come through again. But then he always did. If only the last few months had been a little different, she thought.

The phone rang. It was a loud aggressive ring, almost as if it

were trying to echo the mood of the caller. Baker knew who that person was and stared at the phone for a moment in the vain hope that the caller would grow impatient and give up. The phone continued to ring and he was forced to answer it.

'Baker,' said the angry French voice, 'I am disappointed not to have received a call.'

Alan was determined not to be forced into a defensive discussion and decided to counter the attack.

'I have only just received the news myself. I was having the source verified. I am sure you have little interest in mere rumour.'

'Ah, but it is not rumour. What are you going to do about it?'

'For the moment, nothing.' Said Alan, hoping he had not pushed too far. The phone fell silent. He obviously had. 'I should perhaps explain that I propose to do nothing until I receive confirmation. We are talking about the conclusion of over forty years of planning. Precipitous action at this stage could be disastrous.'

'As could inaction. May I remind you that it was my forty years of investment, not yours.'

'A fair point,' Alan countered, 'which only serves to prove my point. We must have verification.'

'Then try a little speculation and tell me what you propose to do if the rumour turns out to be true.'

'Keep the information from them naturally. Perhaps the Chinese were not as thorough in their control systems as they should have been. In any case, we are close, perhaps just one experiment away from the ability to control and direct the Noril'sk matter. Nothing must interfere with that...Just a moment please.'

Alan opened an email on his computer. He carefully read the contents several times but it was a pointless act. The opening line said all that needed to be said.

'Baker, are you still there?' Questioned the voice on the phone.

'My apologies. I have just received verification. The Chinese deaths have reached thirty-two. That's the full complement of their science team testing the Noril'sk.'

'Are they sure that it was the Noril'sk?' Said the voice.

'Undoubtedly, the CCTV shows them screaming about demons before they set about killing each other.'

Jan's eyes were glazing over. The coloured lines of small jagged peaks and troughs merged into a haze that danced around at the edge of her vision as she struggled to keep awake. Unexpectedly, a cup of steaming coffee was placed in front of the screen. She turned to Brendon and smiled as she gratefully took a sip. The fresh aroma seemed to help and she stood up to have a little walk around the room to help bring her attention fully back into focus. In the meantime, Brendon took her place and resumed scanning through the tens of thousands of results.

'Brendon, can I ask you a personal question?'

'You can ask.' Brendon replied with a self-satisfied smile.

'Why are you still here?'

'Pardon?' Brendon replied blankly.

'I mean, why are you still here at the farm?'

You want me to go?'

'No, of course not.' Jan replied defensively. 'It's just that... well. You have never seemed particularly happy here. At least not since...' She tailed off.

'My little trouble with the local mafia.'

'Liz seems to have had it in for you ever since, although you don't really help yourself at times.'

Brendon ceased studying the graphs and turned around to look at Jan. 'It's been quite a while since you took any interest in my welfare. Is this an attempt to rekindle our relationship?'

Jan gave him an angry look. 'That is exactly what I mean. You know perfectly well there was never anything between us.'

Brendon looked as if he were about to make another smart

remark and then seemed to change his mind.

'Yes, you are right. I suppose it's a form of self-protection, although to be frank, the internal politics here really tick me off. Liz and Bob have seriously screwed things up and Claire isn't much better.'

'What do you mean?'

'Well, haven't you noticed how protective she is towards Bob? Always defending his ambitions and stepping in every time he gets involved in a row.'

'Oh I see!' Jan replied simply.

Brendon became intensely interested.

'You know something, don't you?'

'Whatever I know is not for me to tell.'

'Come on Jan. This is the first interesting thing to have happened all night.'

'That's as may be. If you want something interesting to discuss, you can tell me why you put up with Liz's attitude.'

Brendon looked crestfallen. 'Did Mike put you up to this?' He asked suspiciously. 'I suppose he is still poking around trying to find someone to blame for the leaks.'

'No.' Jan stated calmly. 'Both Claire and I have noticed that she seems to single you out for some of her more caustic comments.'

'Yes she does, but to be fair, as you said yourself, most of the time I deserve it. You know, I have never been able to work her out. Did you know that she head-hunted me?'

'I didn't.'

'I was working for a back-street outfit in the US and going precisely nowhere. The reasons are of course obvious. I built up a bit of a reputation for myself. Then out of the blue, I get a letter inviting me to work here. No interviews or credential checks. Then almost as soon as I arrived, I seemed to be a bit of a disappointment. Of course, it all got worse recently. But, I suppose, to be honest, I am grateful to her. Anyone else would have sacked me after what happened. Liz paid my debts and has been keeping me out of trouble. I have always wondered

why. She never struck me as the philanthropic type.'

'Me neither.' Jan mused.

'So come on, tit-for-tat, what's with you and Mike?' Jan glowered as a reply.

'You know you could do worse. I quite like him, even if he is a journalist.'

'There is nothing between me and Mike. Can we...BRENDON!'

The sudden change from quiet reflection to an aggressive shout, made Brendon jump. 'What the hell is it?' He responded looking very concerned.

Jan frantically made her way past Brendon, almost pushing him off his chair. She grabbed the mouse and scanned back through a series of graphs before letting out another exclamation.

'There, you see.' She said as she pointed to an area of the screen. 'That is what we have been looking for isn't it?'

'Yes Jan. It is.'

The next morning Brendon and Jan walked into the usual briefing meeting. Both were slightly late having had time for little more than a quick shower and a slice of toast. Liz, Bob and Claire were already deeply involved in discussions preparing for the day's work. However, as soon as they were noticed, the room fell silent.

'Whatever you have been discussing?' Brendon interrupted. 'I suggest you set that aside. We have more important things to talk about.'

'You have the results?' Asked Liz.

'We do.'

With that, Brendon walked over to a coffee pot which sat in its usual place and poured both himself and Jan a cup before he sat down. All the while saying not a word.

'Well?' Demanded Liz impatiently.

Brendon winked at Jan who responded with a blush.

'Have I got a tale to tell and you had better prepare yourselves. To start with the Noril'sk is old and by that, I mean really old. We knew that CERN had asked for up-to-date tests based on Uranium 238 and they are currently running verification checks, but at the moment they believe it dates back to the first generation of stars. That is three times as old as our own solar system. Remember that because its importance will become clear later.

So far, we have treated the various and seemingly disparate properties of the Noril'sk as somehow separate. They are not. OK, that bit should not be such a surprise. Bob's discovery that the Noril'sk can open up a connection to other dimensions is not just important to reconciling Einstein with Plank, but is also crucial to answering the question of how life began. But we were wrong in assuming that we could be dealing with a life form because we are not. The Noril'sk is a very basic form of seed. It contains a series of chemical chains, which when subject to right conditions, can replicate themselves. In other words, it contains everything it needs to create life. But each chemical chain is incomplete. It needs to find another compatible chain with which it can exchange missing elements. Now the key difference between the Noril'sk and a crystal is that it can move. I do not mean physically travel, but I suspect the chains use the force of gravity to transmit chemical codes to a compatible chain to allow it to build its missing elements. No doubt Bob can explain the principle of gravity better than Ι.'

Bob looked bemused but decided to play along.

'Space folds around mass. Imagine the skin of balloon stretched flat and tight. In the middle, we place a large heavy object. It will sink into the balloon skin resulting in a dent. Radiating out from that dent are stretch marks; in other words, a gravitational field. Any smaller object placed in close proximity of a large dent, will roll towards the larger one along these contours.'

'Simple.' Brendon replied with a wry smile. Now space is full of these dents and gravitational fields. We can't see them but we can see the effect. The chemical chains transmit their information along these fields. They can be short distances or thousands of kilometres. That is why the effects of the Noril'sk seem to be able to move across vast distances. As gravity dents also move into other dimensions, that is also why we have been seeing particles appear and disappear.

Now, the chains require a particular type of energy to activate that transmission process. To be exact, a weak form of electromagnetic energy. The same form that happens to be produced by the human brain when it is experiencing fear. No doubt when the meteorite fell to Earth 3,500 million years ago it would have found all sorts of energy sources on such a primordial world. So, what we perceived to be different properties, are in fact the result of a single cause, a chemical chain trying to replicate its self. The effects we all suffered are simply a side issue, stemming from the fact that the chain cannot distinguish between humans and the natural background noise of an early universe.'

'Just a moment,' said Claire, 'I thought the Noril'sk struck six hundred million years ago.'

'So it did.' Brendon replied smugly. 'This piece found a cold static world if the theories about the Earth freezing over are true, but I am talking about other Noril'sk fragments. Ones that arrived when the earth was new and had just the right conditions for them to seed the planet with its life creating properties. I think this could have been happening since the first stars exploded and sent complex chemicals out into the universe. In other words, the Noril'sk is genesis.'

Unsurprisingly, the room fell silent at such a wild claim. Even Jan who had been with Brendon when they discovered the evidence, shifted uneasily in her seat. Eventually, it was Liz who ended the awkward silence.

'How could we go about proving such a fantastic claim?' 'We would have to repeat our earlier experiments.'

Liz turned to Bob for confirmation. Now it was his turn to shift uneasily as he realised that all he could do was simply repeat what Brendon had said.

'In theory, that is right. Now we know what to look for, it should be a straightforward matter to set up the correct monitoring system and verify one way or the other.'

'Not with me around.' Jan became alarmed at the prospect. 'Indeed, both you and Liz present us with a problem.' Observed Bob as he looked to each of them.

'If I am permitted to speak, I might have an answer.'

Everyone looked at Brendon.

'Although he screwed it up, our friend Baker was right about one thing. If we can create an alternative and stronger source of beta waves, then the chemical chains will home in on it rather than us.'

'And how could we do that?' Liz replied curtly. 'We already know that cannot be achieved, and unlike Baker, I am not prepared to use animals.'

'We can if we use a wide spectrum electromagnetic pulse to generate beta waves.'

'Will that work? And how will an EMP affect the accelerator?'

'Any wide spectrum pulse will include some beta waves. We now know that a very low level is required and that being the case, the pulse itself can be quite weak.'

'It's got to be worth a try.' Interrupted Bob.

'Of course it has to be worth a try.' Replied Brendon betraying a degree of anger. 'My god this has to be the biggest discovery since Ugg invented the pointed stick.'

Liz studied the faces of each of her team and quietly nodded.

'Quiet.' Bob shouted to get everyone's attention. 'Let us go through procedures one more time.'

The moment the words left his lips he became painfully aware of the barely suppressed groans from his colleagues. Since the decision had been taken to carry out one final test, they had been through the programme many, many times. It was essential that everyone knew, not only the sequence of events but also what to expect. Even though they now believed they had some understanding of its mechanisms, the volatile nature of the Noril'sk left no room for error or misunderstanding. As a consequence, Bob found himself annoyed at their reaction.

Will you please take this seriously?' He raised his voice to emphasise the urgency of what he wanted to say. 'I cannot overemphasise how dangerous this is. We have created three samples of the Noril'sk to test. The first will be placed into the accelerator. The second has been placed in an isolation box which itself has been placed in the hopper. The third has been placed in the middle basement storage area where we have seen the strongest reactions. Once we reach minimum acceleration level, there will be an electromagnetic pulse or EMP which hopefully the Noril'sk particles will latch on to rather than us. If our supposition is correct, the Noril'sk will use this as a gravity path to reach the third sample. Again, if we have got our guesswork right, we should find that both samples have increased their volume. If the sample in the hopper also increases, then we will know for certain that it uses gravity, anything in the hopper is isolated from electromagnetic influences other than gravity. This will confirm

that the Noril'sk contains self-replicating chemicals that use gravity to seek out other chemical chains in order to multiply. If we prove that today, not only will we have found the first step of evolution, we will also have discovered the key to other dimensions. Right now, in this room, we could be creating a new era for mankind.'

As Bob concluded his motivational speech, he noted with some satisfaction that everyone's attention was now properly focused.

'Brendon, you are responsible for monitoring the power supply to the accelerator and for the EMP. You are also our backup system if the automatic cut-out does not work. If anyone shows the slightest signs of being affected, I want that power cut immediately. Is that clear?'

'It is.' Came the reply over the speaker system.

'Claire, I need you to monitor the results. We have agreed not to allow the power levels to exceed ninety-four per cent. Liz is our guinea pig. She is stationed in the middle storeroom and so should be the first to feel the effects if there are any. Her heart and brain waves are being fed through to Jan's computer. Jan has created a programme to automatically cut the power if Liz shows strong signs of distress. Jan has also been similarly wired. Jan will also be responsible for controlling the accelerator. Now is everyone ready? Brendon?'

'Yes?'

'How is Liz?'

'She is fine. She can't hear you because she is already wearing the white noise headphones so that she remains unaware of what is happening.'

'Thanks Brendon. Jan, how is she doing?'

'She is doing well, a little anxious understandably.'

'Jan, are you ready?'

'I am.'

'Claire?'

'I am ready too.'

Bob took in a deep breath. 'Then let's do it.'

'Power initiated and building.' Said Brendon.

Everyone became aware of a low rumbling noise, which began to build in intensity until they could feel the vibrations coming through their feet.

Power levels rising. 25%...26%...27%. All readings show a textbook power up. We should be at the acceleration stage as scheduled.'

'Thanks. Let me know when we are within five percentage points.'

'OK.' Brendon replied.

In the time it would take for the power to reach the required level, there was little for Bob to do. It crossed his mind briefly that he could be saying something to keep up morale but in truth, there was little he could say. He also resisted the temptation to wander around checking the readings from various displays as he did not want people to think that he was micro-managing them. So instead, he sat down and waited, glancing frequently at the clock on the wall as it slowly ticked away the seconds.

No one said a word.

The low rumbling from the accelerator began to fill the room, building in intensity until it excluded any other source of stimuli. It became difficult not to become absorbed into the steadily increasing hum as the giant electromagnets powered up to ensure that the particles travelling at close to the speed of light, remained trapped within the tube. Bob licked his lips and wished that he had brought a cup of coffee with him. Even a simple glass of water would have sufficed, just something to provide a brief distraction from the intensifying hum.

When finally, the moment came, it almost passed unnoticed as the mood was broken by a loud ringing of the telephone.

'Kill that thing.' Shouted Bob.

'Sorry. My fault.' Jan blushed.

Once more everyone became quiet as they keenly listened for the moment when the escalating sound would move out of the range of human hearing. This signalled that the accelerator

had reached the stage when they could release the particles and set them on a path to eventual destruction.

Brendon's voice broke through the monotony, causing everyone to start.

'Power level at sixty-five. Jan, you can begin acceleration on my mark.'

Jan moved her fingers over her mouse in readiness, holding them just millimetres away from the button. They seemed to twitch and move of their own accord as if desperate to get it over with. Jan strained to hear the voice of Brendon but the speakers remained stubbornly silent. She felt her heartbeat quicken. She could hear a thumping noise in her ears as the blood rushed through arteries. The moment Brendon's voice started to say something, her finger reacted instantly. It was only with great effort that she managed to hold off until she clearly understood what command had been given.

'Stage one initiated.' Said Jan as she checked the large monitor in front of her. 'Particles are confirmed in the stage one chamber and building speed.'

Now it was for others to wait. Jan kept her attention focused on the readings as the few subatomic particles began to build to half-light speed.

'We will have achieved stage one in four minutes.' Jan quickly glanced around the control room and found that all eyes were firmly fixed on her. 'Brendon, how are the power readings?'

'Seventy and rising within expected parameters.'

'Then prepare for stage two on my mark.'

Jan watched her screen, waiting for the moment that it would tell her whether the particles had attained the required speed. This would see the point when they were divided and sent racing around in opposite directions before the final collision.

'Feeding in ten.....five...three, two, one.'

'Power levels at seventy-five and holding steady.'

'Hold at seventy-five.' Ordered Bob. 'Jan, we will go for

thirty prior to collision. I want no room for error.'

'Collision at thirty.' Jan repeated. 'We are at ninety-nine per cent of maximum acceleration. The remainder of the count will be in time units. Currently one thousand seconds.'

Brendon, you can begin increasing power levels.' Said Bob.

'Seventy-six and climbing.' Came the response.

'You can also activate the EMP at one hundred seconds.'

'I'm not sure that's a good idea. This is a wide spectrum pulse. I would rather activate it as late as possible given that we need a stable magnetic field.'

'You should have said something earlier. This is not the time to start a debate.' Bob reacted angrily.

'Confirm one hundred.'

'That's better. Jan, how is Liz doing?'

'No change. Heart, blood pressure and cephalographic readings show elevated distress levels, but all within normal parameters.'

'Power levels now at eighty.'

'Five hundred.'

'Claire, once we reach thirty, I want verbal confirmation of the hopper Noril'sk measurements every ten seconds until collision.'

'Confirmed.' Claire answered.

The room fell silent as everyone waited for the count to reach one hundred and the last stage to commence, at least as far as humans were concerned. The actual final stage would happen in fractions of nanoseconds and would be controlled by a computer. In that last fleeting moment, the particles would reach as close to the speed light as was possible to achieve artificially. The paths would then converge and the collision take place.

Bob, Jan, Claire and Brendon became acutely aware of every electronic sound as they waited for the countdown to reach the crucial stage. Even Brendon's breathing could be heard over the tannoy system and seemed at one point to synchronise with the faint vibrations of the electromagnets that could be felt

through the floor.

'Count at one hundred.' Said Jan quietly. It did not need to be any louder.

'Power levels at eighty-seven and EMP emitting.'

'Jan, do we have beta waves?' Asked Bob.

Jan did not reply.

'Jan?'

'Just a moment, the readings are coming through now.'

She turned to Bob and smiled. 'We have beta waves and there is a good level.'

'OK, that's it. Good luck to us all.'

'Sixty seconds.' Said Jan.

'Power holding at eighty-seven and EMP is good.'

'Are all the sensors online?'

'All readings are green. No, just a moment. There's a red line on one sensor.' Jan replied. 'Give me a moment.'

Jan began to frantically check through a long list of codes. The sudden, unexpected problem at such a late stage, simply added to the pressure to identify it quickly. But if she went through the list too fast, she could miss a crucial problem. Then...there it was. Jan breathed once more.

'It's a backup sensor for a secondary test. We are at thirty...now.'

'Hopper samples at 0.05 micros.' Claire was relieved to be taking part rather than just waiting.

'Read offs.' Demanded Bob.

'All readings are green.' Said Jan.

'Power levels at eighty-seven and holding. EMP is good.' Added Brendon.

'All samples stable.'

'Twenty seconds to go.'

'Again, all samples are stable.'

'Liz's readings are stable.' Said Jan. 'Right now, I wish I were in her shoes.'

Bob glowered at such a frivolous remark, but then changed his mind and smiled. 'Yes, me too.'

'Ten and counting.'

'Samples steady.' Added Claire.

Then they waited as the computer took over the running of the test. They waited in silence, each scrutinising the monitors in front of them. Each acutely aware of time as the final few seconds passed and the long line of numbers displayed on the main monitor steadily diminished, and then finally reached...zero.

Mike stared at his phone accusingly. He was trying to reach Jan. The first time he called, it had disconnected for some reason. Now, there was no reply. His first instinct had been to jump in the car and race to the farm irrespective of any order to stay away. But he was in Salisbury and the farm was a good forty-five minute drive. Too much could happen in the time it would take him to get there. Instead, Mike switched his attention to Johann. He had left increasingly agitated messages with the PA, demanding that Johann contact him urgently. That was the reason why he was standing in the car park waiting for a call. A whole thirty minutes wasted.

The news from Weathers had not been good. Mike knew that the people at the farm were due to discuss whether to run another experiment in a desperate attempt to manoeuvre themselves from their current position. Trapped between competing interests with which they could not possibly reason. Johann had convinced him that it was their only option. Now he suspected that his own instincts had been right.

'Damn!' He said out loud to the surprise of a young mother and child passing close by. She gave him a withering look. Mike shrugged an apology and stared at his phone once more. He would give it another minute and then set off. The seconds ticked by and the phone remained silent.

'Are you coming or going?' Demanded an unexpected voice that took him a moment to register. Mike searched for the

source. 'It's just that if you are going, I could have your space.'

The voice belonged to a young man who was standing next to a Smart car which had its engine running.

'Sorry,' Mike responded, 'be my guest.'

Mike got into his car and started the engine. He began to pull away when the phone rang. He jammed on the brake and seized it from the passenger seat.

Johann, thank goodness. Have they started anything yet?' 'Started what?'

'Don't play stupid games. Not now. This is too important.'

'I'm sorry but I really do not know what you are talking about.' Johann responded blankly.

'Then let me explain and I hold you fully responsible for any consequences.'

A car horn sounded.

'I know that Jan and the others were due to resume their experiments this morning. It is absolutely vital that I get through to let them know the results of the tests on the farm structure.'

'Go on.' Urged Johann tentatively.

'The lime mortar is contaminated with Noril'sk particles. I do not know how, but I am sure it must be contributing to the heightened levels of reactions they get. In fact, the whole history of the house supports that theory.'

'Because every incidence has coincided with a disturbance to the structure.' Johann finished Mike's sentence.

The car horn sounded once more.

Mike shouted out of his open window. 'Just a moment will you. Your bloody shopping can wait.'

Even though he could not see Johann, Mike could tell that something was wrong.

'They have already started, haven't they?'

There was a long pause.

'Where are you?' Johann's voice was quiet and cold and filled Mike with a sense of dread.

'Sainsbury's car park in Salisbury.

'I think you had better get over there as fast as you can. I will try to raise them from here.'

The scent of rotten fish and dank air filled Jan's nostrils. The all too familiar smell made her both wretch and filled her stomach with a cold sinking feeling. The consequences were inevitable and the smell of vomit compounded the already noxious atmosphere. Jan remained still and quiet, trying to come to terms with the prospect of reliving her worst nightmare. How could she be back here? What had gone wrong? Jan tried to rationalise what was happening, but a mixture of anger, fear and plain resentment was making it almost impossible. Nevertheless, after some time, the logical scientist finally dominated her internal struggle and she began to feel a little calmer.

Jan closed her eyes and listened. She needed to understand where in the house she was and since she could not see, sound was the only medium available to penetrate the blackness. A faint splash of water droplets striking the floor and the quiet rush of a river far below her feet, provided the information she required. She was in the cellar.

Jan's next course of action was dictated by a primaeval need for light. This meant finding her way to the hallway above and locating a supply of candles. Jan stretched out her hands slowly, but they simply encountered empty space. Her next move was to listen. The sound of water drops striking stone was coming from somewhere behind. She counted the timing between the drops. It seemed that they were not falling from ceiling to floor, but were encountering something on their descent.

Using the sound as a reference point, Jan turned and inched her way carefully towards what she hoped would be a wall. Once more she tried stretching out her fingers and very quickly they touched cold, wet stone. Her next decision concerned the direction she should take. Directly towards the sound, hoping

that there were no invisible obstacles that might block her way, or take the long way round by sticking closely to the wall. She tried to relate the layout of the labs to that of the original cellar and concluded that the stairs were somewhere to her left, which might be the source of the sound. Jan chose to play safe and edged her way around the cellar perimeter. Then abruptly the rough stone gave way to something cold and slimy. The unexpected change in texture caused her to pull her hand away sharply before her conscious thoughts understood the nature of what she felt. Jan gave herself a mental ticking off before resuming her journey. This was a cold damp cellar after all.

After a short while, she found that the wall made a sharp turn to the left and then a few steps later, her foot encountered the object she was searching for. It struck hard against an unforgiving surface sending an unpleasant shock through her ankle and into her calf. Jan bit her lip as she fought to control her reaction. Once the pain had subsided, she began to feel for whatever it was that her foot had struck and was relieved to find that it was indeed the first step of the stone staircase.

This was something with which she was familiar and a few moments later, Jan found herself once more in the wood panelled hallway that stretched from the front to the back of the house. There was a single candle burning over the fireplace. Although there were no windows, she had a feeling that it was night time. The air had that cold, still and damp quality about it. She looked towards the exterior door and saw that there was no light seeping in from around its sides.

Having the security of being able to see allowed Jan to think about what was happening for the first time. Clearly, she was back in the 17th century house. Or at least in her mind, she was and that meant that something must have gone wrong. Somehow, the Noril'sk had ignored the EMP emitter and had homed in on her. Now it was creating the conditions to generate fear and that meant that she had to control her emotions. If she did not, then she could lose her mind permanently.

Jan's mouth dried at the thought and momentarily her feelings began to bubble out of control.

'Get a grip girl.' She said out loud but quietly to herself and then without any conscious intention, she continued. 'I wish Mike were here.'

But he was not and she would have to fend for herself. The question she now faced was how to get out of this situation. That first time, Jan had been convinced that she had actually been transported back in time. She now knew that was not the case. The Noril'sk needed beta waves, specifically the wavelength created by the emotion of fear. To achieve this, it drew on people's inner terrors and created mind tricks to activate them. But this was not her experience and neither was it a dream. Her discussion with Mike's historian had confirmed that what she recalled had been accurate even down to long destroyed parts of the building. Therefore, it must be drawing on someone else's experience. Someone who had actually seen the house and that meant in turn that the Noril'sk must be more than a simple chemical chain. It must be able to store and recreate memories. That was it. It had to be the answer. The only way back to her own world was to go along with the memory but deprive it of what it required. Did that make sense? Jan was not sure, but it was the only reasoned course of action she could think of.

The one drawback to this idea was that it meant finding her way back to that inner cellar where she had seen Rupert, Lizzie and that other... She stood quietly for a moment trying to reconcile herself with what needed to be done. Once more Jan began to feel her emotions welling up. She swallowed hard, picked up the candle from the fireplace and turned towards the door.

No. She thought to herself as the candle flickered on being moved. Not this time. Jan looked around. What she required was a kitchen or pantry, somewhere where the servants stored things. There was another door at the other end of the hallway and Jan made her way towards it. Carefully opening the door

revealed a room filled with many shelves and on one was a row of lantern cases. Someone would be responsible for checking the stables and exterior at night and that meant having a lantern. Jan picked up one and placed the candle inside. This time she would not be deprived of light. As she turned to find her way back into the hall, something caught her eye. It was not what she could see but rather, what she could not. The part of the room that could be seen from the hallway looked solid but the area behind the door had an unreal quality about it. It was just the same as the paintings she had seen the first time. This was something she felt she had to check. Once back in the hall, Jan made her way quietly towards the staircase and stood at the bottom step staring at the walls above her. The paintings were quite solid. Jan climbed the staircase until she reached the landing. Once at the top she turned around and looked back. This time the paintings, like the pantry, were indistinct and hard to see. Just as she had suspected, it was as if this was all based on a memory or something only partially seen as if out of the corner of the eye. Given this new and concrete evidence, Jan felt a rising sense of confidence. She felt ready.

A few moments later Jan was descending the stone staircase that led to the cellar. She held her lantern high to cast as much light as possible. It was a dim, pitiful light but sufficient to make out the dark stones glistening with water and patches of green slime. Just as she remembered there was an iron fence with a gate that divided the room. Beyond it was a storage area and the narrow corridor. The memory of what that contained loosened her grip on her emotions momentarily and it took some effort to restore it. As she stood trying to work up the courage to do the one thing, she would have paid any price not to do, Jan felt very alone. However, this emotion had nothing to do with the Noril'sk. This was a trick of her own memory's devising. Once more Jan found herself battling her natural instincts. A battle she had to win.

Jan took in a deep breath and walked towards the iron gate. She had reached a point about halfway towards it when a sound

made her freeze. It was a faint shuffling noise coming from the direction of the second cellar. Jan quickly scanned her surroundings to find somewhere to hide but there was nowhere this side of the gate. With great reluctance, she opened the small glass door of her lantern, blew out the candle and hid in the shadows of the small semi-concealed space beneath the stairs.

The shuffling sound gradually became more distinct as it seemed to be moving towards her. It had the quality of a heavy cloth swishing along the stone floor. Jan's imagination began to run wild. Surely it had to be Rupert. He was the only one who was likely to be wearing a long cloak. Jan tried to squeeze herself more tightly within her confined hiding space, desperate to make herself as inconspicuous as possible. The sound drew ever closer and then...there was something else, a briefest flicker of light. At first, it barely penetrated the inky blackness, but as the source approached, it began to cast long pale yellow fingers across the walls and floor of the cellar. Jan fought hard to control her feelings but it was difficult. There she was, hiding in the darkness from who knows what, her cover only too easily dispelled by the smallest of lights.

Then the object came into view, a tiny circle of flickering yellow hovering just the other side of the gate. Jan watched, transfixed as it slowly approached, passing through the gate and floating directly towards her. There seemed to be something behind it, something dark and shapeless. Something that she found impossible to see clearly as it made its way patiently towards her insecure hiding place. Then the light began to rise, highlighting a shape, a neck, a chin, a face.

'Liz?' Jan whispered, hardly daring to believe what she was seeing.

Liz raised her hand to her lips as a signal for Jan to be silent. She turned her head to check behind and then seemed to relax.

'This is impossible.' Jan stated in an uncomprehending tone. 'How can you be here?'

'They brought me.' Liz replied.

'They, who are they?'

Now it was Liz's turn to look puzzled. 'Why them of course.' She continued as if the answer was obvious. 'The things in the Noril'sk.'

Now Jan understood. 'No Liz. You've got it wrong. There is nothing alive. It's just an electrochemical reaction that needs our emotions as a catalyst to reproduce itself. It is feeding on our fears. It has created this illusion to generate fear.'

'I know that,' Liz replied impatiently, 'but there is something else. Can't you feel it?' Once more Liz looked around anxiously. It's watching us now. We can't see it of course, because it is hiding in the shadows.'

'Liz, you must listen to me. Please.'

Jan found herself once more trying to suppress her fears. But this time the source was right in front of her and real. If they were not careful, the illusion would find a new direction to take them. Perhaps one they could not control. She had to make Liz understand.

'This is not real. None of this is real. It is an illusion created in our minds. We must both be very careful not to give it what it needs. If the reaction is not fed continuously, it quickly dies away. We just have to remain calm and patient.'

But Liz seemed unresponsive, as if her attention was focused elsewhere.

'We did not understand what we were dealing with.' Liz continued but she was not talking to Jan. 'We thought we were experimenting with the Noril'sk, but in fact, it was experimenting with us. It has been waiting patiently, hiding.'

'Hiding, hiding where?'

'In the walls, in the walls all around us. It has been waiting patiently for over four hundred years. But that is nothing compared to the aeons since they first arrived. They have been waiting for man to progress. To create the technology that would awaken them once more.'

Jan looked at Liz with alarm.

'It was forty years ago that I first encountered them. But I

did not understand. No-one understood. These were the first. They created this world and now they want it back.'

'Who wants it back? You keep saying they but there is no they. There is just an it.' Jan was now perilously close to losing her self-control.

'There is no name. How can you have a name when nothing else exists to use it.'

Jan grabbed Liz firmly by her shoulders. There was a fleeting look of anger on her face, but then she seemed to slip back into her own world. An illusion within an illusion. Jan had to make her understand.

'We are going to make our way to the inner cellar. We are going to see this illusion through to its conclusion and we are going to keep a tight control on our sense of fear, no matter what happens. I know what you have gone through because I have been through it myself and we both survived when others didn't. We survived then and we can survive this.'

Liz looked at Jan searchingly as if trying to examine something deep within. Then she smiled faintly and nodded.

Jan looked for her lantern and spotted it lying in the half shadows, on its side not far from her feet. She picked it up and lit the candle from the one that Liz was clutching. As the light brightened, Jan felt a renewed sense of confidence and they made their way towards the gate. A few moments later and the pair entered the second area. The last time she had been in this room there had been no opportunity to look around. Now she could plainly see and even in the semi-darkness, it had an unwelcome familiarity. The wall behind the gate sported a large number of rusting iron rings whose purpose was all too clear. Jan shivered. Of all the rooms in this house, this one and the narrow corridor beyond yielded the strongest sense of solidity. It was as if this room contained the most powerful memories. Jan turned to Liz to check that she was all right and noticed a second middle door on the opposite side. Everyone knew that there had to be a second door because of the worn track in the stone floor but now she was actually seeing it. She licked her

lips as cold anticipation began to take hold. Something was drawing her towards that door. Its rough, solid wooden slats bounded by blackened rusting metal held her attention in a vice like grip. It was as if she had lost control over her body as it slowly moved forward by itself. A hand stretched out for the wooden peg that would lift the latch. Then quite unexpectedly, her arm was taken in a firm hold. Jan looked up to find Liz gently shaking her head. Jan smiled faintly. Perhaps she was right. Some things were better left hidden in the darkness.

Jan and Liz turned around and found themselves standing before the entrance to the narrow corridor. Jan began to feel her senses overwhelmed by the memory of what she had seen and felt a great reluctance to enter. But there was no other way out of this nightmare.

As they stepped into the confined passage, Jan took hold of Liz's hand. It was ice cold but there was a small sense of comfort in the touch of another person. Just as before, the door at the far end was slightly ajar, affording just a glimpse of what lay beyond. It seemed to both conceal a threat and offer a chance of salvation. Jan could feel Liz's unwillingness to approach that door as the tension in her grip increased. It was a feeling Jan understood and shared, but there was no other choice.

Jan stopped. Her sense of purpose vanished as she stood facing the blackened wood. For the first time, she realised how cold it was as her breath formed small clouds that rolled over the grain before dissipating into the dark. Then she felt her hand being squeezed reassuringly by Liz. Jan gently pushed at the door just enough to see what was on the other side but not enough to be seen. She had been hoping to find the room empty, but it was not. Once more, Jan was confronted with a mad dance of lights from many torches and a silhouetted figure bending over something else. Jan had no doubts now as to what that was. Shortly the figure would turn, the little emaciated girl would be revealed and then it would come. If they managed to control their feelings, they might return to

where they belonged. Hopefully!

'Liz.' Jan said quietly. 'Liz, can you hear me?'

'Of course I can.' Liz snapped sounding like her old self.

'Good, because it is important you understand what will happen next.'

I know what will happen next. They will come. They always do. I have been here many times.'

Jan shook her head. This could not be happening.

'Liz,' she said firmly but barely above the level of a whisper, 'you must get a grip on yourself.'

This time it was not fear she felt but anger. They were so close now and Jan was determined that nothing or no one was going to stop her from getting back.

T'm sorry.' Liz replied unexpectedly.

Jan looked at her and nodded. 'Are you ready?' 'Yes.'

Jan then pushed the door fully open. As she did so the figure of Rupert turned slowly to face them. Just as before, there were tears running down his cracked and aged cheeks. This figure was quite unlike the dark menacing man in the portrait.

Jan was so fixed on Rupert that at first, she failed to register something important. But then, with dawning horror, she noticed a difference. The reality of it drained her of all conscious control and fear returned. There was no Lizzie. Where was she? This was an illusion, an unconsciously crafted illusion that played to a pattern. If the pattern was changed by the Noril'sk, it could mean just one thing. It was adapting.

Then a small pathetic face appeared from behind a half wall. Initially, all Jan could see was the profile and shoulders barely covered by frayed and ragged cloth. Then it walked calmly around the wall and stood facing them. It was dressed in the same torn and stained clothes. Had the same grubby face and rotted teeth, but this time there was something very different. She was smiling, a cold, heartless, evil smile.

Jan involuntarily closed her eyes with resignation as she recalled what Mike had said. How could she have been so

stupid? Elizabeth Angela Turner, daughter of a vicar, Janet Elizabeth Carraway, daughter of a vicar and then there was Lizzie Strider, the first in a line of Elizabeths. A conduit to be used over and over again. It was not Rupert that the Noril'sk had been using, but Lizzie.

Jan stared at the little girl's grotesquely triumphant expression and felt sick. Lizzie was not looking at her, but at a point somewhere behind. Jan did not need to see it. She knew what it was. Instinctively, Jan tightened her grip on Liz's hand to seek reassurance but there was nothing there. Jan felt numb, biting her lip... trying... fighting to maintain control but she knew that it was a battle already lost.

'Liz.'

A small thin voice called out but there was no reply. Jan forced herself to turn and confront the inevitable. Just as before, far beyond the end of the corridor was a grey amorphous shape slowly floating, flowing towards her. Now Jan knew the truth of it. They had been right. There was nothing conscious about this thing. But there was a hunger and an instinct to feed that hunger. Liz had also been right. It had lain dormant for aeons, inactive, inert, waiting until the right catalyst appeared. A person who was able to provide the exact pattern of energy it needed to replicate. A small girl called Elizabeth, the daughter of a vicar. Through the ages, it reacted to that same pattern. Anything else was exploited briefly and discarded. But that pattern was special. Now it had two and could use all the stored memories of horror to extract maximum use from them.

The shape approached closer and closer. Then, from deep within, something else began to emerge. Jan stared, immobilised. All sense of control had now gone. She could feel nothing but fear. All pervading fear. There was nothing she could do but watch and wait. Wait for the inevitable. Jan could see the black stone corridor no longer as the amorphous cloud filled the air and surrounded her body. All sense and sensation began to slip away and her only point of reality was an evolving,

churning mist that seemed to be trying to resolve itself into something tangible. Jan was transfixed, both fascinated and horrified. Even her sense of fear began to ebb, as if it was no longer required. Or perhaps, because she had accepted her fate, fear was no longer relevant. As the tumbling shape moved ever closer, a small thought began to emerge. A thought that built into something vaguely familiar. A thought that lingered at the extreme edge of reason, refusing to reveal itself. Then she knew. Dear god she knew. Jan began to shake her head in denial. This could not be. She was a scientist, a person who believed in reason. She lived in an age of reason. There was no way such a thing could exist. But there it was, and Jan felt nothing but despair as the darkness wrapped itself around her.

As Mike's car screeched to a halt in the farmyard, instinct told him that something was very wrong. The door to the kitchen was wide open and he could see no one. Wasting no time, Mike ran in to the house, shouting Jan's name. There was no reply. Mike headed straight to the basement staircase, barely hesitating as he descended the stone steps. He managed to get halfway before his progress was brought to a rapid halt by a harsh voice.

'Who the hell are you?'

Mike was in no mood for civilities and reacted without thinking. 'Out of my way you bloody fool.'

As the figure brandished a grey metallic gun, Mike took in the military uniform.

'Now, I will ask the question again and this time I expect an answer.'

'His name is Michael Jordan,' interrupted a second man, 'and he works for ASRI.'

'And who are you?' Asked Mike, surprised that a stranger should know so much about him.

'My name is Trantor and I am in charge of security. Captain

Morton, I can vouch for this man.'

'Indeed,' the soldier replied, 'but I would still like to know why you are here.'

Mike realised that if he wanted to find Jan quickly, he needed these people's help.

'I am here because of Jan. She is my...fiancée.' He lied thinking that would negate the need for any further explanation. It failed.

'This is a secure establishment.'

'It does not seem that secure to me. The back door is wide open. Look, as Mr Trantor explained. I am working for ASRI, specifically for Johann Svensson. He asked me to come...'

'Why didn't you say so in the first place,' said Morton, 'it might have saved us a lot of bother. You are aware of what has happened?'

'Something has gone seriously wrong.' Mike guessed. 'So, where are they?'

'As far as we know, behind this door.' He pointed at the entrance that led to the main control room. 'But it's locked from the inside and the locking mechanism has been disabled.'

'By whom?' Replied Mike with surprise.

'Well, presumably by one of the people on the inside. The problem is that this is a solid carbon steel door, designed to withstand a small explosion.'

'Is there no way to override the locking mechanism from the outside? Surely there must be some way to get it open.' Mike began to get agitated at the thought that Jan could be injured or worse.

'Mr Jordan, losing your temper won't help matters.'

'No of course not, sorry. Mr Trantor. Can't you help?'

'There is a control system in here.' He pointed to a black and yellow box next to the door. If am waiting for the key from HQ.'

'But that could take hours. We don't have time to wait for someone to travel from Cardiff.'

'It's not a real key but an activation code. Cardiff can open

this box by phone. That will then give us access to an override panel.'

'And how long will that take?'

'Once they have located one of the directors, not long.'

'What about Svensson?' Questioned Mike in desperation.

'I cannot get hold of him.'

'Then let me have a go.' Mike pulled a mobile phone from his jacket pocket and looked at it. There was no signal. He raced up the stairs and into the hallway all the while checking to see whether any little vertical lines had appeared indicating reception. The line stubbornly remained flat. Mike fought to control his anger as he switched off the phone and then turned it back on again. He watched it slowly make its way through the start-up sequence. Then three magic lines appeared, Mike dialled. For what seemed an eternity the phone remained silent before the dialling tone came to life. It was ringing. Mike listened intently as the dialling tone repeated and repeated.

'Come on will you.'

The dialling tone continued. Then there was a voice.

'Johann. I need your help...'

Mike broke off as he realised that he was talking to a recording. He made his way dejectedly back to the control room door where Morton and Trantor were having an intense discussion.

'I could not get through.'

'Trantor has had an idea which might be worth a try. He thinks that the box may open if there is a short circuit. We could try to drill through the mains wire in the wall.'

'It's worth a go.' Mike was eager to grasp any available straws.

'I thought so. I'll go and find a drill.'

Morton disappeared leaving Mike and Trantor behind. With a moment's inactivity, Mike began to reflect that Trantor seemed to be a very different character to the one Jan had described.

'I am curious to know how you know who I am.'

'I have always known. We are working for the same person. It was due to your discussions with Svensson, that I was sent here to keep an eye on things.'

'Oh, I see.' Mike replied blankly.

I doubt it,' replied Trantor with a faint wry smile, 'but it's not important.'

A short time later Morton reappeared carrying a cordless drill fitted with a very large bit. He fished in his pocket and took out a small black object, which he placed against the wall. He moved it around and it gave off a loud whine every time it passed over a particular spot. He then powered up the drill to test it before placing the point on the same bit of wall. At first, the drill seemed to penetrate the wall quickly, but then the progress stopped.

'I seem to have hit some kind of pipe.'

Mike watched as the drill bit spun frantically but made no progress and it was not long before faint wisps of smoke began to rise from the shallow hole. Morton looked worried.

Then quite suddenly, the box sprung open. Morton instantly stopped drilling and looked surprised.

'That wasn't me.'

'Who the hell cares? Let's get in there.' Mike shouted.

Trantor pulled the box door wide open to reveal a keypad. He pressed a few buttons and the control room door began to open. The room lay in complete darkness. Trantor took a torch from his belt and turned it on. Instantly it picked up tell-tale signs of smoke floating in the air.

'There's someone over there.' Trantor pointed his torchlight at a body lying on the floor on the far side of the room. 'I think it's Miss Bentley.'

'And here are two more,' added Morton, 'but I can't see Ms Carraway or the director. Just a moment.'

Morton made his way back to the door and began to fiddle with the switch. The strong overhead lights flickered for a moment before flooding the room with bright light. Mike could clearly see that there was no one else. He crossed to

where Morton was examining Brendon and Bob.

'How are they?'

I think this one's all right,' replied Morton as he stood beside Brendon, 'but this poor chap is in a bad way. He has a very nasty cut to the head. Trantor! How is Miss Bentley?'

'No signs of any injury and her eyes seem fine. I think she should wake very soon.'

'Good, then that just leaves one problem. Where are the others?'

'Have you checked the rest of the house?' Mike asked.

'Not yet.' Trantor replied.

'Then I suggest the basement, specifically the third cellar.'

'Why there?' Morton asked.

'Because that's where we found Jan the last time.'

They quickly made their way through the storage area and into the third cellar. Jan was lying on the floor and as far as Mike could recall, in the same spot. His heart sank as he approached her. She looked so still and white against the dark grey stone slabs. He knelt down beside her and as he did so, she opened her eyes and smiled.

'There's someone else over here.'

Mike looked up and noticed that Liz was lying a short distance away.

'I'll phone for a doctor.' Said Morton.

'Thank you.' Mike replied quietly.

Jan closed her eyes once more.

'How is she?' Mike asked as the GP emerged from Jan's room.

'Resting quietly and I have given her a sedative.'

'And the others?'

Both Miss Bentley and Dr Prince are awake and in good spirits, if a little vague. They are healthy and strong and although I think it best for them to go to Salisbury for tests, I

do not foresee any problems. Dr Stanton has yet to recover consciousness which is a bit worrying. I have arranged for him to be seen by a specialist, however it's Doctor Pierson I'm most worried about.'

'Why? I thought that she had recovered and was talking.' Said Morton.

'That's just the trouble. What she is saying makes no sense. She seems fixated on an idea that something evil has invaded this place. She kept trying to warn me that it must be destroyed. I'm going to call in a colleague of mine.'

'That won't be necessary.' Morton responded with dispassion. I have already asked for one of our people to look at her.'

'I don't know about that. She needs proper care and attention. She has not been shot you know.'

Morton looked patient. 'She will be given the best of care. I assure you. You said she was talking. Do you think I could ask her about what happened?'

'You could try, but I believe you will get far more sense out of Miss Bentley or Dr Prince. Now, if you will excuse me, I want to see what has happened to that ambulance.'

A moment later Morton and Mike walked into Claire's bedroom. She and Brendon were in close conversation but stopped as soon as they realised, they were not alone.

'If you want to find out anything, you had better ask Claire, my memory is still hazy.'

Morton and Mike looked expectantly at Claire as she sat on the bed.

Well,' Claire appeared uncertain, I am not sure how helpful I can be. Like Brendon, everything is unclear. I do remember that the programme was going smoothly until the moment we collided the particles. We were expecting to see the Noril'sk samples increase in mass, but nothing happened. Then the walls seemed to shimmer and everything became chaotic. Brendon appeared from nowhere and began to attack Bob. I tried to stop him, but he was like a man possessed. So was Bob.

I have never seen him like that. It was as if they were both filled with an overwhelming sense of hatred and fear of each other.'

'How did you stop them?' Asked Mike quietly.

'I couldn't. I even hit Brendon with a chair. But nothing seemed to affect them. So, I decided the only thing I could do was to stop the power.' She shrugged her shoulders. 'After that, I remember nothing until I woke up here.'

'And what about you?' Said Morton to Brendon.

'Can't help you I'm afraid.'

'Can I see Bob?' Claire asked plaintively.

'I think that's up to the doc.'

'Please, I really need to see him.'

Morton hesitated a little too long in giving in his reply which Claire seized upon as permission. She rushed from the room leaving behind a bemused Mike and Morton.

'What do you make of that?' Asked Morton.

'Make of what?' Replied Mike as he watched Claire rapidly disappear through the door.

'All that about walls shimmering.'

'What if I was to tell you that the mortar in the basement stonework is heavily contaminated with particles of Noril'sk matter.'

'From the original fall out, that's quite a coincidence.'

I doubt that. I think the whole history of this place is tied to the local geology and the unique nature of the Noril'sk. I don't think ASRI was just interested in the view when they decided to locate a research centre here.'

'It's a pity we can't talk to Dr Pierson. We got to know each other well enough, but if she is as poorly as the doc says, then it should be someone she trusts. I don't suppose that you...'

'No.' Smiled Mike. 'I don't think I would be suitable. Now, Bob would be a different matter if he were well enough.'

'What about one of the others.'

Mike's face cracked into a large grin. 'There is someone.' Mike glanced quickly at Brendon who was staring out of the window.

'Get along well, did they?'

'Not in the least but I think that if she could relate to anyone, it would be him.'

About half an hour later the ambulance arrived and Mike went to alert Claire. As he opened the door, he found her holding Bob's hand. It was obvious she had been crying.

'I just wanted to let you know that it's here. I'm sure you can go along if we ask.' Said Mike with a gentle smile of encouragement.

'Thank you, I would like that.'

'Here, put this on.' Mike handed her his wedding ring and she looked puzzled.

'Just in case they ask... Better keep your hand closed to stop it from falling off.' As he was about to leave, Mike hesitated. 'Do you mind if I ask.'

'About two years. It was not long after I arrived. We decided to keep it secret because everyone works so closely here,' she paused for a moment, 'and because Bob was worried about the age difference.'

'Actually, that was not what I was going to ask.'

'Oh!' Claire looked slightly embarrassed.

'I was going to ask whether it was you who programmed the divert into the communications system.'

Claire nodded sadly. I thought if we had enough money we could move away from here and make a fresh start.'

'And what did Bob think about that?'

'He did not know. He would have been horrified.' Claire looked crestfallen. 'I suppose I should have known. If Baker was able to work it out, others would as well.'

'Baker knew.' Said Mike with surprise.

'He has been blackmailing me to keep him up-to-date with what was going on. I suppose it will all have to come out.'

'Well, let's see, shall we. I should keep quiet for the moment.'

Mike sat down in the kitchen having just made himself a cup of tea. The house seemed empty even though Morton, Brendon and Liz were still around. It seemed empty because, after the frantic events of the day, everything was now quiet and peaceful. But he knew that this was little more than an interlude. The days ahead would see an urgent investigation to establish exactly what had happened and why. Most importantly, no further bombardments of the Noril'sk could be permitted and that would entail a procession of closed-door high-powered briefings and meetings to build support.

Mike looked at his watch. He would set off for the hospital soon. Even though he had been told that he could not see Jan until the morning, at least he would be there. But for the moment he would take advantage of a few quiet minutes for himself. Mike stared into the tea and allowed his mind to wander as small wisps of steam rose lazily from the cup. He began to think of his newly acquired cottage and how peaceful it seemed compared to his London flat. Despite a love of the city and its hectic streets, he now found himself toying with the idea of staying. It was a ridiculous thought of course. His nomadic lifestyle would never permit him to live so far from the media and scientific hub that provided him with an income. But it was nice to dream, if only for a short while. Soon, such thoughts began to merge with other images as extreme tiredness overwhelmed him.

A distant ticking clock slowly penetrated a confusion of recollections. Small white specks of light spilt from a tunnel and began to dance at frantic speed to the tune of a soft melodic chime. Then the chime became unmelodic before finally metamorphosing into a distant cry.

Brusquely he was awakened as Brendon burst into the room. 'Jesus Christ! What now.' Mike reacted.

'It's Liz. She's gone bananas.' Said Brendon. 'Did you see her?'

'She didn't pass through here.'

Brendon looked uncertainly around as if trying to decide what to do next.

'Given what she has been ranting about for the last few hours, I was sure she would try to get into the basement.'

'Not a chance. No one is allowed down there apart from Morton's people. Maybe she went outside through the front door.' Mike put his tea down. Till give you hand to look for her.'

Quite what it was, Mike could not be sure. Perhaps it was his own reference to her leaving the house, but an image of the heavy metal door at the rear of the animal shed, flashed into mind.

'Does Liz have access to the power room?'

'Yes, of course. She's the director.'

'And is she familiar with your nuclear generator?'

The colour drained from Brendon's face. Without a word, he rushed past Mike and out into the yard almost knocking over Captain Morton.

'Just a moment?' Morton reacted, but Brendon was gone, racing towards the rear of the outbuildings.

A simple look from Mike was enough to alert the trained soldier that something was seriously wrong and they both ran after Brendon. They had just reached the pole barn when the sound of a loud metal clang jarred through the air. This served to quicken their pace, but as they approached the door Morton strangely stopped well short of it and began to fiddle with a small metal box that was hidden in the sandstone wall.

'Automatic locking mechanism which I can't open.' Morton said as he pointed to a keypad. T'll go and get Trantor.'

Mike was left alone wondering what Liz's intentions might be and what, if anything, could be done to prevent her from doing something silly. But several centimetres of metal provided him with his answer. He looked at his watch and then in the direction from which he expected to see Morton and Trantor emerge. Weren't there supposed to a hundred

safeguards to prevent this sort of thing.

When they both finally appeared, Trantor was very out of breath. He tapped a series of numbers and instead of the green door opening, a section of wall seemed to slide both inwards and to one side.

It was odd, Mike thought as he began to descend the metal staircase on the other side of the hidden doorway, he had often wanted the chance to see the generator room. Now it was the one place he did not want to be.

The staircase was steep and opened onto a long breeze block corridor with a single door at the end. It stood slightly ajar providing a tantalising glimpse of the room beyond. Morton was already checking the entrance into the main complex by the time that Mike arrived. It was rather an incongruous room for its purpose, looking more like the inside of a garage, than a place to control frontier technology. It was functional, cold and bereft of furnishings apart from a plain desk, office chair and a laptop computer. Morton stopped checking the only other exit and turned to confront Mike with a slight shake of his head. As he looked once more around the bare room, Mike noticed two more things. The first was that the laptop was showing various parts of the farm but the small square that should have been showing the interior of the generator room, was blank. The other was an open wall safe.

'It's used to store a pistol,' said Trantor, 'safety precaution. The question is, who took it?'

Morton picked up a microphone from the desk.

'Dr Prince, can you hear me?'

There was no reply. He tried again.

'Dr Prin... What is his first name.., Brendon?'

Mike nodded.

'Brendon, this is Andrew Morton. I have Mike with me. Can you talk to us?'

There was an odd shuffling and rasping noise and then the face of Brendon appeared on the laptop screen.

'Yes, I hear you. She's managed to get into the main

generator control room and time locked the door.'

'We are not able to see what is happening. What do you think Liz is going to do?' Said Morton, as Mike held his breath.

'She is convinced that the Noril'sk is evil and must be destroyed.'

'Brendon, I want you to think about this very carefully. Is there any real prospect of her being able to cause a nuclear explosion?'

'Quite easily I'm afraid. Part of our training in how to prevent anything from going wrong includes the theory of how to sabotage the reactor. Everyone has to double up on other people's skills. Liz doubles on mine. However, I have my own control systems that she won't know. I have overridden the time lock and I should be able to get through to her in a moment.'

'Who has the gun Brendon?' Asked Trantor.

'I do.' Brendon hesitated for a moment as if unsure what to say next. He then seemed to come to a decision. 'Standard Procedure Trantor.'

'Standard procedure. What's that?'

There was no reply.

'Brendon, what is standard procedure?' Mike persisted.

Again, there was no reply. Mike looked at Morton and realised that he too was familiar with the term.

'In the event of a deliberate attempt to sabotage the generator or to start an overload, the first duty is to protect the public.'

Mike looked horrified. Not because of the order but because of who Brendon was.

'Is there no way to get in?'

'Not from here.' Replied Trantor. 'The door is locked and it can now only be opened from the inside. She must have activated the security system to stop anyone from gaining access. I guess Brendon used one of his own systems to override it.'

'So, all we can do is wait.' Said Morton and he pulled the

chair from underneath the desk and sat down.

On seeing Morton's apparently relaxed attitude, Mike finally grasped the reality of their situation. The only one who could do anything to stop Liz from sabotaging the reactor, was Brendon and the only thing they could do was wait. The end, if it came, would happen too swiftly for them to comprehend. Mike looked around for another chair, but Morton had the only one. So instead, he perched himself on the edge of the desk next to the laptop.

Somewhat surprisingly Mike found himself feeling very calm, almost detached from the reality of their situation. Death was not something he thought about often, but he had expected the end to be mundane. Perhaps, in a bed of some foreign hotel and marked by a small piece in the obituaries to acknowledge the passing of an unimportant life. A recollection of the notorious if apocryphal headline 'Small earthquake, in Chile, not many dead' could have provided an ironic epitaph given the life he had led in his youth. Now however, his name might possibly be linked with a more cataclysmic demise. Somehow, it was not a comforting thought and he looked for distraction. Trantor, true to his nature, continued his security duties by studying the monitor as it provided a rotating panorama of the farm. The images of the reactor complex remained empty and quiet with the exception of the control room. A blank screen betrayed only too well that Liz had a clear purpose in mind when she had left her sickbed. Mike's eyes then rested on the relaxed, almost nonchalant form of Morton who looked as if he was asleep as he sat, eves closed, legs propped on the desk.

Mike only became slowly aware of a faint scuffling noise and looked around in puzzlement for the source. After a short while, he realised that it was coming from the laptop speakers. Morton and Trantor became aware of his curiosity and noticed the sound as well.

'Here let me.' Said Trantor, brushing Mike aside.

He fiddled with the controls briefly and the faint noise

resolved itself into a definitive sound.

'Sorry. I should have remembered. The control room is permanently monitored for sound as a security measure.'

Mike, Captain Morton and Trantor listened carefully for any sounds. They could hear a steady heavy breathing which they thought might be Liz. This was occasionally interrupted by a soft footfall. Then the speakers exploded with voices.

'Liz, please move away from that panel. You don't want to hurt anyone.'

There was a brief silence in response.

'I see you have managed to override the safety controls for the cooling system. You do realise the consequences of your actions.'

'Brendon is giving us a description of what she is doing.' Said Morton quietly. 'Trantor, can you relay this to ASRI HQ. At least they will know what happened.'

'Liz, I am sure that you do not want to harm innocent people.'

'They must be stopped.' Liz's voice was calm to the point of seeming disconnected from her actions.

'Yes, I understand,' Brendon replied, 'but if you go through with this, you will destroy the whole vale. Do you really want to be responsible for so many deaths?'

There was another brief silence before Liz responded.

You cannot possibly know what they are capable of. There is no mind for us to reason with, no sense of compassion or mercy. This is a disease and if we do not stop it, the whole human race will suffer. Dear god, you cannot imagine the horrors they can create.'

'I understand how dangerous it is. I think we have all learned our lessons.'

'Do you think so?' For the first time, Liz began to sound angry. 'I knew the dangers of meddling with Noril'sk and yet I allowed Bob to persuade me that science must come first. You cannot tell me that people have learned anything. We all know what will happen. The politicians will make promises and then

someone, somewhere will think they can manage the risks and quietly start work on it again. I cannot allow that.'

'Liz, we do not have the only samples. Even if you destroy this one, there are many others.'

'Don't you think I know that? That is why I must do this. People will see. They must see. If I show the world just how perilous it is, no one will dare to experiment with it again.'

'And you think that by blowing us all up, your message will get out.'

'No one, not the government, the Army or ASRI can hush up a nuclear explosion in the heart of Dorset. Yes, I think the world will condemn me but they will also ask why.'

This time the silence lasted much longer. Mike stared at the blank screen, trying to reconcile himself with what might happen next.

'Brendon. I am so sorry that it was you who followed me here.'

'Why Liz?'

'I did not mean to be so hard on you. It's just that I hoped you would sort things out. I am very proud of you. I want you to know that. But you do understand don't you.'

'Yes Liz, I understand. Liz, please for the last time, you can stop this. We can both walk out or here. We can find a way.'

'I am glad you understand.'

'Liz. Please move your hand away from the panel... Liz...'

The voice was cut short by a muffled sound and then silence.

A few moments later they heard another sound. This time it was much closer as the heavy door that separated them from the reactor complex, gradually opened. Captain Morton unholstered his own gun and pointed it towards the door as a hand appeared.

'Brendon, please put your gun down.' Morton said in as calm a tone as he could manage.

Brendon stood in the doorway. His knuckles white and shaking as he held a gun rigidly in front of him.

'Brendon, did you hear me?' Morton continued.

It took Brendon a moment to comprehend that Morton was talking to him but when he did, he lowered the gun.

'I had to do it, didn't I?'

'Yes Brendon,' Morton replied, 'you did.'

Connections

Mike sat in a large, old and very comfy armchair. He stared at the deep yellow flames in the fireplace through a glass of Dalwhinnie, whilst contemplating his firm decision not to return to London, but to make a home in this out of the way village of Stour Provost.

The decision had surprised everyone, not least himself. He had always been a committed townie but the events of the last few months and particularly the last few days had caused him to rethink his priorities. Thirty years of wandering from country to country, seeking distractions from his responsibilities, had not only put an end to his marriage but had led him inexorably to a point in his life that he did not like. The plain fact was that he had been a willing contributor to the schemes of others and those schemes had ended tragically. Whilst he could not have possibly predicted the outcome, there was no escaping the contribution he had made.

There was also no escaping the fact that he had faced the certainty of death. For a brief while, he had no future. Now he wanted one and he wanted it to have some value, if only for himself. An itinerant life of producing literary wallpaper, briefly fashionable but ultimately destined for the recycling bin, no longer held any attraction.

The door opened and Jan walked in. She was wrapped in a large white towel and was using another to dry her hair.

'I'll have one of those.' She said indicating Mike's almost empty glass.

Mike reluctantly climbed out of the chair and made for the whisky bottle.

'Did you manage the shower?' He asked as he poured them

both a generous measure.

'It was fine. I don't know what you were fussing about.'

'I am sorry your room was not aired. I was not expecting you until tomorrow.'

'I got fed up with the hospital and just wanted to be somewhere normal. Besides which, they could find nothing wrong. I was just using up a bed. By the way, have you heard about Bob? He will be discharged on Wednesday.'

'I did. I gather that he and Claire have resigned. I was really surprised by those two.'

'Well, I don't know why. It was obvious they are a couple and I gave you enough hints.'

'That you did,' Mike smiled, 'and what about you? Do you have any plans?'

'Not really. Svensson called and told me to take as much time as I need before I go back to work.'

'But not to the farmhouse.'

'Hardly, as it is being pulled down and replaced by something modern.' Jan smiled. 'Without six hundred million year old meteorite dust in the mortar.'

'Svensson was telling me that they still have no idea why the lime mortar had such high concentrations. All the other 17th century buildings in the area have just a trace. But clearly, that was the cause of all the disturbances.'

'I remember you saying that there was a link when you first came.' Jan replied. 'But I still do not really understand why it focused on the walls rather than the sample we provided.'

'Quantity. I think it was as simple as that. You have to remember that the Noril'sk acts like a virus seeking out a suitable host. The farm building not only contained a rich supply of chemical chains for it to bond with, but it also found the perfect specimen in the form of a little girl to create the right type of energy it required. Thereafter it simply sought out that same pattern. If Svensson is right, it was down to a combination of circumstances and simple bad luck. Frankly, I have my doubts. I have never believed in coincidences.'

Connections

Why is that?

'Because I have learnt that one of my oldest friends finds it all too easy to lie. I also know that ASRI is quite capable of playing the long game and I have begun to wonder whether the Noril'sk is quite as simple as everyone thinks.'

Because of its ability to simulate other people's memories.' Jan ventured.

Mike smiled. 'Perhaps I do. It all seems to indicate that we still have a scant understanding of how that substance works.'

Jan took a sip of her whisky and looked thoughtful. 'You were saying that you do not believe in coincidences. You were referring to why the farm alone has such a high concentration of Noril'sk participles?'

'I do and I don't like mysteries.' Mike noticed a look of concern flash across Jan's face. 'But that is for others. Our part in all this has ended. Actually, if Svensson is right, I would find it a little sad.'

'Why?' Said Jan as she stopped drying her hair.

'All that history and reams of archives studied by who knows how many students, and in the end, it turned out to be little more than a cold.'

Jan frowned.

'OK, a very bad cold.'

Jan sat down opposite to Mike and sipped her drink once more.

'Do you think Brendon will ever find out?'

'That he killed his mother? I very much hope not. I think that poor chap has quite enough to contend with. I cannot even imagine what it was like to have been in his position.'

'No.' Jan replied quietly. 'They told him to take extended leave but he said he needed to keep busy. So, they are sending him to Pandar to supervise the clean-up.'

'Sounds like a good idea. Perhaps distance will help. I certainly hope he has a good chance to sort himself out. I think he deserves a break.'

'I think Svensson is of a similar mind and has realised

Brendon is someone who is worth investing a bit time and effort.' Jan replied in contemplation. 'And what about you Mike. Are you sure you are going to be happy here?'

Mike did not reply immediately. He sipped his whisky and briefly wondered whether the time was right for the discussion which they had both been avoiding. He concluded not. Somehow since that night in the pub, it never seemed to be the right moment. Perhaps that time had passed.

'I need a change.' Mike began. 'I have a couple of books that are almost ready for publication and a few contacts. And I think it well past time I stopped running away from commitment. I suppose a quiet country life could get a little boring, but right now I cannot think of anything I would rather have. Well almost.' He smiled.

Jan flushed faintly. 'You don't mind if I stay awhile.'

'No, of course not. You can stay as long as you like.'

'Thanks. Like you, what I need most is a large dose of normality.'

Jan then leaned across and kissed him gently.

'What was that for?'

'For being you.' Jan replied. 'Sometimes you have to lose a thing before you can truly understand how important it is to you. If you don't mind, I think I would like to go to bed.'

Mike said nothing as she made her way to the middle of the room and the timber staircase that led to the upper floor. All the while his thoughts raced to make sense of what she had said. Then his face broke into a broad smile.

Other titles

in the Connections series include:

The Condyne paradox ISBN 978-0-9934328-0-4 (e-book)

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Inspiration



In 2009, a dear friend faced a significant milestone. The big '5-0'. I puzzled for weeks about what I could give him as a suitable present. He had been passionate about astronomy since our student days and finally, the answer hit me. A meteorite, what else? So, began the kernel of an idea.

I was actually working on another book at the time. I had created a cliff-hanger at the end of my first story, The Condyne paradox and spent some months on an outline of a story that would eventually become The Occam factor. Whilst I was loathed to set it aside, it had come to a natural pause and this provided an opportunity to revisit the theme of the Connections series. The one thing I was very keen to avoid was to create sequential stories that required the reader to buy all the previous books in order to understand the plot. I also wanted to avoid creating predictable formats. Yet I found myself using the same three-story style for The Occam factor as I had done for The Condyne paradox. I decided, therefore, that Noril'sk would consist of a single story that was largely

self-contained. Noril'sk also helped to cement the idea that the Connections series, whilst exploring the idea of survival, would consist of books with very different approaches to that theme. I hope you enjoyed Noril'sk.

Cheers Julian