The Occam factor

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.

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What if?

Every story begins with a single thought, what if?

"A multiverse is a hypothetical set of multiple universes that together form all that exists. The term was coined in 1895 by the American philosopher and psychologist, William James. Today, there are any number of ideas as to how this concept might answer some of the fundamental questions about the nature of our own universe. For example, why gravity appears to work in different ways in the visible universe of stars and planets and the invisible universe of sub-atomic particles.

A great 20th century conundrum stemmed from the principle that the greater the mass of an object, the greater its attraction to any other object that comes within its gravitational field. This culminates in the form of a black hole from which nothing can escape. Yet, a small magnet can attract a paper clip away from the Earth, which is eight thousand kilometres across. This apparent weak nature of gravity might be explained by the existence of multiple universes. That is, gravity is weak because it is spread thinly between different dimensions. If that is the case, then other forces might also be able to travel between these various dimensions.

One concept of the multiverse supposes that an event can lead to an infinite number of possible futures. Each action creates a parallel universe where a slightly different consequence is played out. If we are constantly creating alternative futures, then each future must also have a different past."

John Carroll

Introduction

There is a point between sleeping and being awake when you are equally aware of both. The cosy numbed senses of the dream world initially prevail, but these are increasingly influenced by the demands of an external reality until those senses have no choice but to acknowledge its presence.

The first of these demanding influences to make itself known was light. Light proved particularly demanding of attention. It penetrated the eyelids, highlighting veins and arteries against a ruddy orange background. An involuntary flicker of those lids resulted in them being shut tight against a painful intrusion.

The next sense to make itself known was warmth. Unlike light, this was a pleasant sensation that played over the skin and penetrated the clothes. Neither too hot nor too cold, it was a lazy warmth that could easily dispatch the body back into a peaceful dream state.

The remainder of these external influences were less distinct. There was something that was both smooth and sharp that cosseted and penetrated the skin. The overall texture was soft and forgiving. It moulded itself around the contours of the body providing a comfortable haven. It also seemed to vary in temperature. The immediate sensation was one of accumulated warmth, but this overlaid a cooler feeling buried below the surface. However, the material was also unpleasantly sharp. Little pinpricks dug into the face and hands and were impossible to escape.

There was also a smell. It was a familiar odour that was curiously evocative of youth, a reminder of sunny days and happy times. The scent was accompanied by a sound, which only served to reinforce this memory. Its source was clearly very close but it was a sound that suggested a sense of vast distance.

There was one final sensation and it was one that seemed most determined to impose its will. It had begun pleasantly, a soft refreshing feeling on the skin that cooled and soothed as it flowed. But as time passed, it picked up speed and was now arriving in fits and spurts, bringing with it the tiny pinpricks that forced themselves into mouth, nose and eyes. There was also something cold and wet. It washed over and then retreated, dragging with it the little pinpricks. It came again but this time reached much higher. There was no longer any choice in the matter. The eyes would have to be opened and whatever challenge lay outside, confronted.

To begin, just one eye was partially opened. A small crack of light entered and the soft fuzzy existence vanished in an instant. The light was unpleasant but not as painful as it had been the first time. Through the light emerged a colour. It was a bright bold colour that created a sense of both cold and warmth. There was also another colour, brighter and paler than the first that yielded pain if held in direct view.

A brief passage of time and the eye came comfortable once more and based on this, a second eye was opened. This provided clarity to the view. Light became a discernible blue colour that almost wrapped itself around his entire being. Beneath was white and in front, a shape, something dark against the background of blue light. There was a brightly coloured cloth and beaded hair, large brown eyes and a smile. It seemed rude not to acknowledge the presence of this shape but the mouth refused to form words. Therefore, the only alternative was for the body to move. Folding hands and arms beneath to provide leverage, first the head and then the torso changed to an upright

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position, but then came pain and a roaring sound that threatened to overwhelm the other newly regained senses. Finally, there was simply black.

Chapter one

Colonel Craig sat at his small and functional imitation pine desk, which itself was situated in a small and characterless office on the fourth floor of a nondescript office block on the corner of Pike and 1st in the city of Seattle. It was a fitting building for the Joint Military Resource Management Unit. The ground floor was occupied bv an accountant, another non-descript profession that attracted little attention from the passer-by and that was the intention. Likewise, the acronym JMRMU had an uninspiring sound that was little noticed when compared to others of greater interest such as the CIA, NAWRAD or NASA. It slipped through the annual budget allocations and the occasional political audit, unnoticed.

Craig glanced at a clock on the wall and noted that he had a few minutes until his appointment. Standing at the window he could see a busy intersection with the original Starbucks across the road and a fish market on the seaward side of the junction. As was usual for February, it was a grey rainy and uninspiring day and he was glad to be warm and dry indoors unlike the poor souls below, cowering beneath their hats, newspapers and magazines.

Craig looked down at his desk and specifically at a manila file that lay on top. Paper files were an increasingly rare sight these days but irrespective of security regulations, he preferred to see things properly written down. His guest, who should be arriving shortly if she was on time, held similar views. At least according to all the reports, he had read.

This was going to be a tricky meeting if those reports

were correct, but one he hoped would prove profitable. By and large, Craig liked the more difficult tasks, but this was going to be a particularly tough nut to crack because it involved Europeans. Not that he had anything against them. His sister was married to a Finn and the woman across the street to his house was some kind of a commander in the British police and she was pleasant enough. Nevertheless, his stint in the regular army had taught him to be cautious when dealing with Europeans. So many different languages and cultures made them more difficult to calculate when considering risk factors. This was why he needed an intermediary, someone who had worked with them for many years and understood all those different cultures. Someone who had the right expertise and this one was the ideal candidate.

She had an impressive military record. There was a minor problem connected to promotion, but that was the way it was sometimes. Some people had excellent qualities but did not have the right stuff to progress beyond a certain point. This one had also provoked some concerns amongst the top brass. As for so many, North Africa had proved to be a sorry episode. Western nations had looked for scapegoats to ease their damaged reputations and many a good soldier had paid the price. In this one's case, there had been an incident in which a prisoner had died and a mother and child had not been given the protection promised. He had some sympathy with her decision-making, but necessary action in the field did not always read well back on home soil, particularly in the face of a media outcry.

Nevertheless, she had done well. In the five years since leaving the army, she had made a name for herself. In fact, he was sure that he had seen her in the news at some time.

There was a knock at his door and an attractive woman was shown in. Craig stood to greet her.

'Ms Sands. Thank you for coming. Can I get you a coffee or some water?'

'Coffee will be great, thank you. Black, no sugar.'

Craig directed her to a small sofa and once he had made the coffee, he sat down opposite. She was a handsome looking woman in her late thirties and looked younger in real life than she did on her internet profile. Light brown collar length hair, hazel eyes and she was stylishly if not fashionably dressed. His overall impression was that she had an air of confidence.

'My name is Colonel Craig; Tim. May I call you Catherine?'

'Please do.'

'My apologies for the short notice, but the matter I want to discuss is both sensitive and urgent. I trust you have been informed that you are still bound by your oath of loyalty?'

'I have.' Catherine answered blandly.

'You have been approached by Zidane Industries with an offer of a job leading an archaeological expedition to the Black Sea.'

'You are well informed.'

Craig smiled but did not acknowledge the statement directly.

'Have you had any thoughts about accepting it?'

'I have.' Catherine replied, but did not expand on the point having decided that two could play the mystery game. However, Craig did not let the matter go.

'And what were those thoughts?'

'I will decline.'

'Can you give me your reasons?'

'I could but what business is it of yours?'

'It would be helpful.' Craig replied simply.

Catherine studied Craig for a moment and decided that

there was nothing to be gained by being needlessly secretive.

'I'd be lying if I said that the project was not of interest. Northern Turkey has a fascinating history and geology. The conjecture that there is an important archaeological site off the Black Sea coast is not beyond the bounds of reason. But to be frank, I don't much like the setup. Smacks too much of a PR exercise for Zidane, rather than a serious exploration. I also don't like all the secrecy about who else will be working on the project. No, all in all, I think I will steer clear. After all, I have a reputation to think of.'

'So, is it Zidane Industries that you have something against or perhaps the man himself?'

'Neither.' Catherine responded in an annoyed tone. 'They have invested heavily in good causes for many years, but...' She broke off.

You have doubts about the motives of a man who founded a multinational based on developing revolutionary computer technology and has a reputation for ruthless acquisitions.'

'Let's just say it gave me food for thought about where his real interests lie.'

Craig stood up and returned to his desk to retrieve the manila file. When he sat down again, he made a point of reading it in front of her, taking in a deep breath as if pondering the report of a disappointing student.

'I see from your résumé that you have been leading a Bristol University team in Iraq investigating a nine thousand year old settlement off the shores of the Tigris. Before that, you were working on a North Sea site off the coast of England and before that...'

'Do you intend to go through my entire career?'

'Just the more interesting parts, I want to be clear in my mind about why you are so important.' 'I am flattered.'

'I meant to Zidane,' Craig acknowledged, 'but then nothing is obvious with this guy.'

'Do you know him?' Catherine asked.

'Not personally, just from his file which is quite considerable.'

'It might help if you stopped playing these stupid games and just told me what this is all about.'

Craig snapped shut the file and grinned.

'You know it might at that.' He continued. 'So, potted history. Back in the 1940s during the Second World War, a large meteorite struck the Earth just north of a Siberian town called Noril'sk. It landed at the height of winter when even daytime temperatures can be in the minus thirties and back then communities could find themselves cut off for weeks. It was not until early spring that the bodies were discovered.'

'Bodies?' Catherine interrupted.

'It seems as if an entire village ran out into the arctic snow and froze to death. Those were turbulent times when even countries like the States, was driven by paranoia. As a result, the whole thing was quietly buried, and I mean that literally. Then about thirty years later, the old Soviet communist government decided to send samples of the meteorite to select universities around the world. Within weeks seventeen people died and more were driven mad. Then there was another gap before a British company called ASRI resumed experimenting on the meteorite. That also nearly ended in disaster.'

'This is all very intriguing but what has this to do with me?'

'I was getting to that. After the ASRI incident, there was an international agreement to ban all experiments on the meteorite. I cannot be specific about what the problem was because that is classified. I can say with certainty that the material is extremely dangerous and for that reason, all samples were safely locked away by any government that had them. But as always, reality has a way of undermining good intentions.

In the early 1970s another British company called Cambridge Electronics, developed an interest in mining after they obtained a sample of the meteorite. They were taken over by ASRI, which also developed an interest in mining. Some years ago, ASRI was bought out by Zidane Industries. Since then, they have developed a large portfolio of mining interests.'

You think there is some connection?' Catherine questioned. 'But I thought Zidane was into everything.'

'So he is, from computers to banking to airlines. And yes, a move into mining could make good business sense given that the materials they need to make SAPs, are apparently very expensive. And that is the second interesting connection. How much do you know about SAPs?'

'I know they are computer processors that power everything from kettles to satellites. Other than that, it's not really my field.'

'Of course not, a SAP is a Self-Activating Processor. It works by getting one molecule to exchange programmed particles with a nearby molecule. In doing so it both transmits information and creates the small amount of power it needs to work. Apparently, they are quite tricky to create and need vast amounts of ore, but they last a lifetime and can be regularly modified so they never go out of date.' Craig stopped as he realised that Catherine still looked puzzled. 'Some time ago, Zidane announced his resignation and took up archaeology. A little odd don't you think?'

Catherine still looked puzzled. 'It has been known. I gave up the army.'

'No offence meant. In his last year, ZI increased its mining interests quite considerably. The interesting thing is that the ore is not being shipped anywhere. It's just being refined and stored. Our analysts calculate that if nothing changes, Zidane Industries is heading for bankruptcy, which is in itself a concern as the company employs millions across the world. They also agree with the financial media speculation that Zidane remains in charge of his empire. That being so, why the interest in Turkey?'

Catherine looked at her watch purposefully. 'I am sure this is fascinating for someone like you, but I am simply an archaeologist. I do not see how I can help.'

'You should know from your time in the army, that good intelligence work is often based on tenuous fragments of information. We are pretty sure that Zidane is up to something and we are concerned that it might be connected to the banned research into the Noril'sk meteorite. So, to keep an eye on him, we agreed with the Brussels Government to grant an archaeological research licence to his team despite its proximity to a sensitive security site. But what we really need is someone on the inside. We made it a condition of the licence that he had to have a senior archaeologist in charge and then recommended you. That is why I would like you to reconsider your decision.'

For some time, Catherine remained silent whilst she considered the proposal. It had taken her quite a while to get used to civilian life and now she liked her quiet, predictable existence. In some ways, the idea was enticing. A chance to make a difference once more but there would inevitably be a price to pay. There always was.

'No, I am sorry. The army and the government sold me out. That is not an easy thing to forget but I have a new life now and all in all, it's a pretty good one. You will have to get someone else.'

'Ah!' Craig replied. 'What a pity.' He stood up and went to the window. The drizzle had turned into hard driving rain and the people in the street were running for cover. He led an odd sort of life. The people below had no idea who he was and yet he and people like him made decisions that could have a significant impact on their lives, for good or otherwise. He turned back to face Catherine contemplating his next move.

'Why did you turn to archaeology when you left the army?'

'It was not such a difficult choice. I took my degree in the subject.

'Yes, I know but there must have been more to it?'

'I suppose that I had had enough of the living. They are too unpredictable and I'd also seen too much destruction, too much of the grizzly side of death.'

'So you chose to dig around old bones?'

Catherine smiled. 'I get irony but I don't dig around old bones, just old buildings. Besides which, history defines who we are, as individuals, as nations and as a species.'

'In that case, I have something that I would like you to see.'

Craig reached into his desk drawer and took out a large carefully wrapped package, which he handed to Catherine. She cautiously removed the wrappings to reveal a substantial fragment of coloured glass that might have belonged to a rose bowl or similar size object. Ceramics and glassware were not her area of expertise. Her field was landscapes and buildings, but she had seen enough to suspect that this was a forgery. On the surface, it looked Greek, perhaps 2,500 years old but it was clearly machine made rather than hand spun. Craig anticipated her thoughts.

'It was found off the coast of a Turkish town called Hopa and it has been authenticated at around fourteen thousand

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years old. I am assured by the British Museum that it is genuine, something to do with impurities in the glass. I can let you have the full report if you like.'

'But it is machine made.'

'Yes,' Craig replied, 'intriguing, don't you think.'

'And this is what Zidane is looking for?'

'That is what we are not sure about. If it is, then good luck to him, but if it is something else, perhaps something connected to Noril'sk, then we must know.'

'You still have not told me what it is about this meteorite that is of such interest. It must be pretty significant for countries to actually agree on something.'

Craig regarded her for a moment before leaning forward in a conspiratorial manner.

'I'm sorry Catherine but there are some things I cannot share for now, but I can remind you that history shapes the present and should be left alone.'

As Catherine emerged into the main airport concourse, she spotted a tall good looking man in his mid-forties holding a hand written sign with her name on it. Her battle with two large suitcases must have been a comical sight because he smiled warmly and ran to help.

'I don't suppose you are Ms Catherine Sands?'

'I am and you are?'

'John Lunn. I have been sent to collect you. Let me take those cases.'

'Thanks.' Catherine replied. 'I couldn't find any trolleys.'

'No you wouldn't. This is only a small regional airport. The car is just outside.'

He led her out of the sterile air of the blue and white

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terminal building and into the warm sunshine of a Turkish spring day. It quickly overwhelmed her and she was glad to sit down in the car. Soon they were driving along the coast towards a range of hills.

'This is going to be quite a drive, I'm afraid.'

Catherine groaned out loud.

'You have come a long way. How was the flight or should I say flights?'

His accent was clearly English but there was something odd about it, Catherine mused.

'Three altogether and I haven't a clue what time it is.'

'It's just past three.'

She looked at her watch which proclaimed it to be after 5.00am.

'Is this your first time in Turkey?' John asked.

'No, I have been to the south on holiday but it's my first time in the north.'

'Well, you will find it very different. This is a working area.'

'Have you been here long?'

'Just over a week... Get off the road, you bloody idiot... Some people should not be allowed in a car.' John smiled reassuringly. 'Listen, why don't you try and get some kip.'

'Some what?'

'Sleep. We won't arrive for at least another three hours, probably later if the traffic is bad.'

As she entered the hotel restaurant, Catherine wondered whether she would recognise anyone, but there was little need for concern. She had barely made it past the maitre d' when the tall figure of John Lunn stood up and beckoned.

Catherine smiled nervously. Everyone stood up and rattled off a list of names that were instantly forgotten apart from one. Andre Zidane looked exactly like she expected the world's richest man to look. Modestly yet elegantly dressed and oozing charm as he extended a hand and guided her to an empty chair with practised ease.

If the hotel was anything to go by, his employees were well treated. The cost of her room was quite beyond her means and a quick glance at the menu revealed that it had no prices.

There were six people, including herself. To her immediate right sat a young man who was obviously Turkish and next to him was another man who was probably in his fifties. From the craggy look of his face, he had probably spent most of his life outside. After Andre Zidane, came John and finally another man who was in his mid-thirties and had an odd, almost sleazy look about him.

'Now that we are all here, I think some introductions are in order.' Said Zidane.

Catherine detected a slight French accent, but it was barely noticeable.

'To ensure there is no false modesty, I will do the courtesy. In accordance with the principle of ladies first, we have our team leader, Catherine Sands. Do you wish to be known as Catherine, Cathy or Kate?'

'Catherine will do.'

Yes, of course.' Zidane replied. 'Catherine is our expert in landscape archaeology and has extensive experience of ancient near east civilisations and the terrain they chose to live in. Some of you may be aware of the work she did in locating the Aanda site in Iraq. Quite inspired. She is also an expert in ancient building techniques and has published a number of papers on the transition from hunter-gatherer to village life and its impact on landscapes. She is thirty-

seven, never married, although she was once engaged. Likes to keep fit which is a relic of her army days.'

Catherine found herself turning red as Andre unexpectedly moved from a professional to personal description and crossed her fingers in the hope that he would quickly move on to someone else.

'The gentleman with the blond curly hair is John Lunn. John is from Blackpool, England and is our diving expert. He has worked on an impressive range of projects from recovering the 17th century warship Anne to the Pacific gas storage projects. Incidentally, he is credited with discovering three new species in the Marianas Deep, which I feel sure he will happily tell you about whenever presented with the opportunity. John is forty-four and has been married more times than perhaps can be socially justified.'

'Or financially.' John smiled mischievously.

'The young man sitting next to Catherine is Kemel Isik. Kemel will be our indispensable contact with the local population. He is also an archaeology graduate for whom they had to create a special grade to acknowledge his work on recovering DNA strands. He is twenty-six and until he came here, lived with his parents in a small village about two hundred kilometres from here.

Also, next to Catherine is a long standing employee of mine, Brad Condyne. Brad will not be working with you but I invited him along because he is leading a team for my old company ZI, and I felt sure that your paths will cross from time to time. Finally, we have Herr Sebastian Klein. Now I am sure Seb will not mind my saying a few words about that regrettable incident at Florianopolis. The media loves to exploit anyone who cannot defend themselves and I can assure you that most of what you may have read is untrue. I am a firm believer in recognising talent and Seb's knowledge of Upper Palaeolithic civilisations is unrivalled.

Apart from that, he is fifty-five and unmarried. That completes my summary. The rest you can find out for yourselves.'

'There is one person you have missed.' Catherine observed with a purposeful look.

Andre smiled a little self-consciously.

Yes of course. How arrogant of me to presume foreknowledge. I am fifty-two, single and retired. As a young man studying in Berlin, I and one of the professors, Johannes Heuttenbauer, developed the principle of molecular programming. This led to the invention of a new type of processor that works in a similar way to brain cells. I left university and found some backers to enable me to start production. That led to the creation of ZI.'

But why the switch to archaeology?' Catherine pursued. Andre showed a momentary irritation at being interrupted but then just as quickly resumed his usual air of affable charm.

'Not an obvious move, I will admit. But then neither was yours. However, to answer your question, I am by nature driven by the need for new challenges. My business became so successful it no longer held any interest. I have always been curious about the past and I am rich enough to indulge my whims. But do not think this is all just a boy's toy. I take all my projects seriously and will do everything I can to ensure our work is taken as such by the various international bodies. Shall we order?'

For the moment Andre seemed to have capped any chance of further questions, but Catherine could tell that she was not alone in wanting to find out more about what he was planning. She could also tell that she was not alone in her anger at discovering Sebastian Klein was present. Had she known she would never have agreed to join the team. Clearly, his presence was at the root of all the secrecy.

Catherine looked at the menu that thankfully included an English translation and some vegetarian dishes. She chose wild mushrooms in a cucumber and yogurt sauce. The wine, which had already been selected, included a bottle of Narince which she recalled from a holiday as being particularly nice.

Whilst people were studying the menu no one said a word, but once the waiter had taken their orders, John immediately jumped in to resume the earlier conversation.

'As I am probably the most ignorant of everyone around the table when it comes to archaeology, why the interest in Northern Turkey?'

Andre did not immediately reply but instead reached under the table for a brown package which Catherine recognised immediately.

'This was sent to me last year. I do not know by whom.' What is it?' Asked Seb.

Andre passed him the package which he carefully unwrapped.

'Looks like a broken glass bowl.' John remarked.

'Yes, it does,' added Seb, 'but not one you could find in one of your English boot markets. Catherine. Would you like to examine it?'

She took the object having decided not to say anything about her previous encounter. However, on closer inspection, Catherine quickly realised that although it was similar, it was not the piece she had been shown in Seattle. It was possibly another fragment of the same artefact, which begged the question, had Craig sent a piece to Zidane or had some third party sent pieces to both. In either case, the most important question was why.

'Glassware is not really my area.' Catherine realised that everyone was looking expectantly towards her. 'But I would hazard that it is Greek.'

'I can see why you might think so. The design has strong classical lines, but I think not.' Added Seb.

'And why is that?' Asked Andre.

'The glass is too fine. This has been blown at a very high temperature. Look at how even and thin the glass is and there are no visible impurities. If you examine the section which includes the base, it is flat and rough, almost as if it had been cut. In fact, if I had come across this in any other setting, I would say that it was a 20th century piece, made for tourists.'

'Have you had the glass analysed?' Catherine asked sensing a de-ja-vu moment.

'I have.' Andre replied and then paused.

'And.' Catherine added becoming impatient.

'The glass includes trapped bio-matter that dates to around twelve to fourteen thousand years ago. Of course, that is not definitive proof. It is possible that the glass became exposed to ancient remains when the bowl was made.'

'But isn't that very unlikely given the temperatures required? Anything organic would have been incinerated.' Said Brad uncertainly.

'Not necessarily.' Added Seb. 'Carbon signatures would survive.'

'Really, I didn't know that. So, where was it found?'

'Apparently, about seventeen kilometres north from Hopa. It was uncovered by a dredger, at least according to a note that came with the piece.'

'Andre.' Seb began to look agitated. 'Are we on a treasure hunt based on an unauthenticated provenance?'

'No. Irrespective of its appearance, the glass does contain impurities, mainly airborne particles that would have been around when the glass was blown. Some of those are traceable to this area as well as the Upper Palaeolithic era.

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'What size area are we discussing?' Asked Catherine.

'About two thousand square kilometres.'

A low whistle came from John. 'That is quite a substantial area.'

'It is but I am advised that we are probably not looking further than twenty kilometres from the coast.'

'Even so,' Catherine picked up on Seb's concerns, 'an area measuring one hundred by twenty is a significant challenge.'

'Yes indeed,' answered Andre, 'and we have been fortunate in that ZI was already present and had the contacts in local government to help us obtain a license to explore the area. That saved us a great deal of time.'

'On that subject, what plans do you have?'

'Two arctic exploration ships are on their way, which I have been assured, will dock tomorrow. I have had one fitted with geological survey equipment. I have also hired a drone and a mini-sub for the summer. Other than that, you can prepare your own shopping lists. In addition, ZI is developing a new kind of craft. I cannot say more as it is still being tested, but I have been assured that it has a revolutionary technology that could prove very useful.'

'What kind of technology?' John asked.

'That is a difficult question for me to answer but what I can say is that it will help to develop a new kind of non-evasive archaeology.'

'No digging!' Seb spluttered. 'Where's the fun in that?'

Andre smiled. 'It will help to identify what lies beneath the silt so that when we do dig, we will be in the right area. Now enough shop talk. I suggest we use the rest of the evening to get to know each other better. After all, most of us will be cooped up together for the next few months.'

At that moment, the food started to arrive and each began to talk to the person next to them. Catherine had

noticed that Brad had an American accent and used this as an excuse to make conversation. She was also curious about the other work Zidane had referred too.

'Where in the States are you from Brad?'

'Seattle.'

'Now there's a coincidence. I was there a couple of months ago. So how did you end up working for Andre?'

'I joined as an intern.' Brad took a sip of wine and seemed to be considering his reply. 'Actually, there is not much to tell. I was one of those boy geniuses that society doesn't like. Graduated at fifteen and gained my doctorate before I was twenty.'

'What in?'

'Discrete Mathematics and before you ask it's the science of computer math.'

'Actually, I know what it is.'

'Really, if I had a dollar for every time I'd been asked, I'd be richer than Andre.'

'So, are you working on this craft Andre talked about?'

'No, another project entirely but I hope to use it when it arrives.'

'Which means that you must be developing some kind of new survey system or you are looking for something specific, but not archaeological?'

'Catherine my dear,' Andre interrupted the conversation, 'how are your mushrooms?'

'Delicious, thank you.' Catherine responded whilst trying to conceal her annoyance.

'As I said, enough shop talk. There will be plenty of time in the coming months.'

Although the smile remained, it had subtly changed from warm to steel cold. A warning if ever she had seen one. After dinner, John, Kemel and Catherine sat in the bar. John had gone to find a waiter, which gave Catherine a

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chance to talk to a fellow archaeologist.

'You were very quiet during dinner?'

Kemel smiled a little sheepishly. 'You all very important peoples and my English, not so good.'

'It's good enough and far better than my Turkish which is actually non-existent. You know, I wouldn't mind learning a few words.'

'You would like me to teach you?'

'That would be great if you have time. For instance, what is this?' She pointed at the table.

'Yemek masasi.'

'Yem ik mas sasi?'

Kemel smiled at her attempts but is was a friendly smile. 'Yemek masasi.'

And what about this?' And she held up her wine glass.

'Şarap cami'

'Şarap cami.' Catherine echoed.

'Yes, you are very good.'

'Flatterer. Andre complemented you on your degree.'

'Yes, I think that he likes to... flatter you said.'

Catherine nodded.

'Yes, he likes to flatter when it suits him.'

'But it is in archaeology. What was your specialism?' 'Forensics.'

'Yes of course, your DNA paper. Did they really have to create a special grade for you?'

Kemel responded with his unique sheepish smile.

'That is very impressive. Look, I don't know how you feel about it, but I am frankly alarmed to find we are working with Sebastian Klein.'

'I am not sure I understand.'

'You don't know about Florianopolis?'

'Now I realise. Alarmed means the same as worried. As I say my English. I am worried, but I think I know little about

him.'

'Even so, it's bound to call into question the merits of any discoveries we make.'

'I agree but what can we do?'

'Well, I am going to have a word with Andre, but I do not have to bring you into it.'

It was very late when Catherine finally made it back to her hotel room. John had proved the social type that does not take no for an answer and it had been a long time since she had spent an evening just talking and drinking. She gratefully slipped out of her shoes and headed for the bathroom. As was usual, hotel mirrors tended to be unkind and this one was no exception. Worse still, it covered the whole of one wall. Not something she wished to be confronted with after two days of flying and a late night. Catherine shuddered and tried to ignore what was being reflected.

Her cases had been unpacked and toiletries were neatly stowed away. Hotel staff seemed to have their own system based on finding the most obscure location possible for any object. She was able to find her toothbrush quickly, but the toothpaste remained firmly hidden. After a few minutes, she gave up and simply used water.

On entering the main room, the bed looked both inviting and daunting. She never slept well on the first night in a strange room and crossed her fingers that this time it would be different. Despite the curtains being closed, light from the street lamps easily penetrated the flimsy fabric. Catherine began to search for her eyeshades and pulled open a bedside cabinet drawer. There was her toothpaste lying on top of a piece of paper. Puzzled, she opened it out to find just two printed words. "I know."

The following morning a meeting was convened in one of the hotel conference rooms. Kemel was busy working with a projector and the others were sitting down eating breakfast. As she took in the scene Catherine realised that she would have to set aside any hopes of spending a quiet day exploring the town. It looked as if Zidane expected them to start work immediately.

'Good morning everyone,' the man in question began, 'I hope you all had a good night's sleep. The Explorer One moored in the harbour this morning and is currently undergoing customs checks. That means we have around six hours to make use of and so I have arranged for a tour this afternoon...'

This sounded promising thought Catherine.

"...of the local food and equipment suppliers, we will be using over the next few months. The bus will arrive at noon. Until then I would like to spend the time discussing potential survey work. Kemel, could you show us a map of the region?"

Kemel was standing at the back of the room holding a tablet and with a few strokes of his pen, a large image of Hopa and the surrounding coast was projected into an area at the front of the room.

'The Black Sea,' Kemel began a little nervously, 'is an inland sea bounded by Europe, Anatolia and the Caucasus and is connected to the Atlantic Ocean via the Mediterranean and Aegean Seas. The Bosphorus Strait connects it to the Sea of Marmara, and the strait of the Dardanelles connects it to the Aegean Sea region of the Mediterranean.

The geological origins of the basin can be traced back to the demise of Tethys Ocean about fifteen million years ago. Since this area's creation, it has suffered significant volcanic activity and it was this activity together with the end of the last ice age that led to the creation of the Black Sea.

The Black Sea's entire history has been one of eccentricity. It has been both a fresh and saltwater body. Even today, seven thousand years after the last great inundation, it has high volumes of freshwater entering it from the combined flow of the great rivers of the Danube, Dnieper, Kuban and Dniester. This freshwater influx has created a distinctive marine environment which is protected.

The modern seafloor is divided into distinct areas. There is a large shelf to the north, which is about one hundred and ninety kilometres wide. The southern edge is the one we will look at and is about twenty kilometres in wide. However, the Black Sea's most unique feature and the one from which it gets its name, is an anaerobic or oxygen free layer which exists below the oxygen layer. It starts at around one hundred and fifty metres and is about three thousand metres deep.

If the dates of the artefact are correct, then at that time the Black Sea would have been a freshwater lake with a surface about one hundred metres lower than it is today.'

'Thank you Kemel.' Said Andre. 'Does anyone have any questions?'

'Yes I do.' John held up his hand. It seemed the natural thing to do as this had all the appearance of a school lecture. 'Is any of this about looking for evidence of Noah's Flood?'

'I believe the timing is wrong.' Replied Andre in a questioning tone.

'Around seven thousand years too early.' Added Catherine.

'I think we are all more interested in looking for evidence of ice-age life than biblical stories. Which neatly brings me to the main point of this discussion, where do we start to look?' 'Do we have any detailed topographical maps?' Asked John.

'The last study was carried out over fifty years ago but there has been some volcanic activity since then.'

'So, no UVB maps. We could buy one from EUSAT and use that for a more detailed study of the seabed using the drone you mentioned at dinner.'

'What is the most up-to-date one we have?' Asked Catherine.

'A Google Earth map. It's a good 3d guide but as Kemel observed, there has been recent volcanic activity. Kemel do we have that?'

In answer, a large 3d map appeared before them and Kemel used his tablet to zoom in on the two thousand kilometre shelf that might have been the origin of the bowl.

'As you can see, there are a number of possible sites. It would be useful to try to narrow it down if we can.' Said Andre. 'Catherine. Do you have any ideas?'

Catherine stood up and made her way towards the map. 'Most early settlements were based near sources of fresh water and pastures. Therefore, we are looking for any area where there was a river or freshwater lake that was close to flat grasslands.'

'That does not help.' Seb interrupted. 'Since the whole sea consisted of fresh water.'

Catherine ignored the point. 'Any grazing animals that would have sustained local communities would have also been prey for carnivores. If we look at modern grazing animal behaviour, they prefer to drink from rivers, even when there is a large freshwater lake available as it makes them less liable to predation.'

'What is the bed made from?' Asked John.

'Silt to a depth of one to three metres.' Answered Kemel. 'Which means we can forget visual references.' John frowned. 'We could use sonics?'

'We could but that will take some time to map an area of two thousand square kilometres.'

'Who's in a hurry?' John smiled.

'There seems to be a range of three sub-surface peeks which might be of interest. Each of them could have been above water at the time.' Seb contributed with an air of self-assurance. 'Wouldn't you say they would make a good starting point?'

'Possibly,' Catherine admitted grudgingly, 'but there are other more likely areas. It depends on their relative depth.'

Perhaps it might be useful if both Catherine and Seb could provide everyone with an idea what we are searching for.'

Catherine glanced quickly towards the back of the room where Seb was sitting. She had hoped to restrict any contact with him, given that she was plotting the best way to get rid of the man. This was not a welcome situation, but neither was this the right time for a confrontation.

'Perhaps if I talk a little about habitats, Herr Klein can add anything he thinks is relevant.'

Seb nodded his agreement.

Upper Palaeolithic people are often pictured as scratching out a living in frozen wastes. Nothing could be further from the truth, although climate played a very important role in shaping our destiny. Fourteen thousand years ago, Europe was emerging from the last ice age. Southern Europe would have been a mixture of deserts and cold grassland whilst the north would still have been covered with ice. From about thirteen thousand years ago, the climate began to warm. Within a few thousand years, the local flora would have changed substantially from dwarf cover plants such as juniper and willow, to softwood firs and later hardwood trees such as birch. If the dates of the

artefact are correct, we are looking for the remains of a people who still had to migrate with the seasons. This may be connected with movement patterns of large grazing animals, or it could be that they roamed to take advantage of seasonal food supplies such as fish. A nomadic lifestyle means that signs of habitation will be hard to find as we would be looking for the remnants of short lived temporary camps made from whatever wood or other materials they could find. Alternatively, as we saw in the North Sea, families might have carried animal bone and cured skins with them to make tents or tepees.

Artefacts would be small, portable and possibly of a very high order, most likely made from flint or bone. There have also been finds of sown animal skin clothes and shoes. To summarise, we are looking for a landscape that provided a variety of foods and tools essential to support a complex society. For example, grassland with access to freshwater, most likely a river, which would provide better access to fish and a mobile culture that was adapted to making the best use of locally available resources. Is there anything you wish to add Herr Klein?'

'No, thank you Ms Sands, I think your summary is excellent.

'Are there any further questions?' Asked Andre.

No one responded.

'In which case, we will meet outside the hotel at noon.'

At twelve sharp everyone took their seats on the minibus in readiness for a tour of the city. Like the others, Catherine chose a window seat, determined not to miss a chance to see the town that would be their home until late autumn. Sitting alone also provided an opportunity to reflect on her situation. After several years of civilian life, she had been concerned that her military training might have dulled with time, but after just a few hours, Catherine had already made a number of discoveries. The presence of Brad Condyne and a dedicated second ship to test secret equipment simply added spice to speculation over why Andre had abandoned leadership of the world's biggest company. The fact that he employed the discredited Klein proved there was little interest in the credibility of whatever archaeological discoveries they made. Craig had clearly taken considerable steps to ensure that he could keep an eye on Zidane. It was also reasonable to surmise that he was the source of the fragment sent to Andre. The only caveat to this line of thought concerned what could be gained by orchestrating Andre's selection of Hopa as a base. Catherine was beginning to recall the sense of exhilaration she used to feel at the start of every mission and was quite enjoying herself. The next step would be to build a role as a trusted confidant to Andre to gain access to the information Craig required. That was the step but the route remained elusive.

The minibus left the main coastal road and began to make its way through the meandering streets as they climbed a steep hillside. Hopa was a town trapped between a range of hills and the sea and its growth over the last fifty years had taken it deep into what would be considered as uneconomic terrain in other areas. Hopa had at one time been a fishing community which had then been developed as a port. There followed a brief flirtation with tourism before it settled back into relative obscurity. It did however, have two things going for it, which continued to attract a small but dedicated stream of visitors. Firstly, the countryside was unspoilt and offered a view of a Turkey that had long disappeared elsewhere. Secondly, it was sunny

and secluded. That was how the hotel brochure described the town.

Apart from a few dotted buildings, most of the architecture was functional and modern, but there were many small cafes, bars and restaurants to fill the hours. There was also a large shopping mall perched on the summit of the hill overlooking the sea. On the other side of the hill, they entered a suburban area. None of the houses were older than thirty or forty years but there had been some attempt to blend this area in with the older Hopa that hugged the shoreline. Square plastered houses with red Romanesque tiled roofs snuggled tightly against the steep incline of the hill.

Almost one hour after they started their tour, the bus entered the countryside. This part of north east of Turkey was green and lush and alive with patches of red tulips. The bus turned left at a fork in the road and stopped beside a small wooden hut. Kemel got out of the driver's seat and beckoned everyone to join him as he stood beside what looked like the entrance to an underground concrete bunker.

'I am sure you are all wondering what the purpose of stopping here might be.' Andre spoke loudly to ensure that he had everyone's attention. 'This is a remnant of a munitions test facility. I think it might make a useful place to store finds but I would be grateful for your opinions before deciding whether to secure it.'

Kemel led the way down a concrete ramp towards a pair of heavily rusted doors. On the other side was a narrow corridor of concrete walls, dimly lit by a few suspended light bulbs. The floor was partially covered in water which explained the dank, musty smell. Along each side of the corridor were a number of doorways. Some had doors, which featured heavy metal wheel locks. Others had doors

that were propped up, lying on the floor or missing altogether.

As everyone made their way towards the end of the corridor, the lights fizzled and all looked nervously at Kemel who had the only torch. He simply grinned cheekily.

Beyond the corridor lay a large grey concrete room. It was empty apart from small pools of water and white stains running down the walls.

'I don't think we would have any problems maintaining high humidity but are you seriously expecting to need so much space.' Asked Catherine.

'I have always been an optimist. It is better to have too much than not enough.'

Catherine could not argue with that. Ten minutes later they emerged into the sunshine once more. Catherine had deliberately trailed Andre with the idea of having a quiet word.

'Do you have a moment?' She called out after him, but not so loudly as to attract attention from the others.

'Of course, did you want to discuss the storage?'

'Actually no.' Catherine smiled politely.

'Ah! In that case, I think any discussion had better wait until we have a little more privacy. I am having a little welcome-aboard drinks party for the team at eight. Why don't you join me in my cabin beforehand? Would 7.45 be convenient?'

Catherine knocked on the door to Andre's cabin aboard the Explorer One. It was opened by a small fussy looking woman who promptly left, leaving Catherine slightly bemused. As Catherine got her first proper look at the surroundings, she found herself struggling to suppress making any sound that acknowledged the size of his quarters compared to hers. Not that hers were unpleasant, just small. But then this was an old ship, designed for scientists rather than pleasure cruisers.

'Welcome to my humble abode.'

Catherine visually examined the large square room fitted out with an oak floor, wall to wall bookshelves and two very expensive looking sofas. It had all the appearance of an old fashioned library rather than a ship's cabin.

'May I get you a drink?'

'Thank you. Yes, a white wine... May I ask who the woman was that has just left.'

'Woman?' Andre looked puzzled. 'You mean my PA, Ms Short. I think she was anxious to catch the launch. No sea legs.'

Andre opened what looked like an 18th century cabinet to reveal a large array of drinks.

'Indulgent I know, but I hated the idea of being parted with my most treasured passions.'

'I know nothing about furniture. Is it real?' Catherine regretted asking such a stupid question as soon as the words left her lips. However, Andre did not even flicker an eyelid.

'Hepplewhite or rather an early 19th century version, I suppose that means that it is not real.' He handed her a glass of wine and pointed to one of the sofas. 'You wanted to have a discussion about Herr Klein I think.'

'That is correct.' Catherine responded a little too formally for just two people and consciously tried to settle her nerves. 'This project does not have the support of the established academic institutions because it has not been set up or funded by a credible academic source. Irrespective of your intentions, you are in the eyes of academia, an amateur. Should we make any worthwhile discoveries, the results are

likely to be challenged by every expert in the field, simply because of your name. Then to top that, you employ a man like Klein. We could unearth the greatest archaeological find of the century and yet there is little chance of our work being taken seriously. I have to question whether it is frankly worth your money and time to carry on.'

Andre looked bemused and did not respond immediately. He took a sip of wine as he considered the points made by Catherine.

You have a regard for unvarnished truth. I appreciate that. It is not often that people are willing to be so candid with me. Therefore, I will reciprocate. Firstly, I am aware that the archaeological establishment has taken umbrage that a mere amateur has the means to... shall we say, work outside of their cosy world and I am not in the least concerned. Half of my former company was built on challenging indolent sectors.

However, that said, I have no interest in setting up in competition but if they wish to see my work as such, that, as you Americans would say, 'is their baby'. What does interest me are the challenges. Firstly, finding the source of the artefact and secondly, in developing a new kind of archaeology, one that can extract the history without disturbing it. Archaeologists have plundered the ground for long enough. Have you ever considered how much knowledge has been lost to current historians due to past inadequacies? As a man with a background in computers, I know how fleeting technology can be. As soon as it's invented, it becomes obsolete. I am looking to bequeath something a little more enduring.'

'If you have so little regard for the establishment, why approach me?' Asked Catherine indignantly.

'That was not through choice Catherine.' Andre responded in a reflective tone. 'But do not take that the

wrong way. I have a great regard for your experience. However, it was the bureaucrats in Brussels who caved in to demands that we employ an independent expert which dictated your presence. I am not used to being told who I should and should not have on my teams. But there it is.'

'As you say there it is and here we are. Or at least here you are M. Zidane. You may be able to afford to ignore the opinions of the academic world but I cannot. My reputation depends on the quality of my work and working with a man like Klein on a project which, to be frank, stinks to high heaven, is not likely to help.'

'Which begs the question, why did you accept my invitation?' Andre's tone was beginning to develop an edge.

'If I had been aware that Klein was on the team, I would not have done!'

'Catherine, you still have a choice. If you are unhappy about the setup, then I accept your resignation, with regret of course.'

Catherine realised that she had been expertly outmanoeuvred. She had hoped to use Klein's presence as a way of strengthening her own position by making Andre think that he needed her more than she needed him. Her next step was crucial. If Andre perceived a cave-in it would weaken her position. On the other hand, if she walked away, Craig and his organisation would not be pleased and that was something she could ill afford. In the end, it was Andre himself who cast a lifeline.

'Perhaps there is an important point you have not considered. You are the team leader and as such have responsibility for assigning work and approving publication of any material concerning our finds.'

'Final authority?' Catherine questioned.

'Of course. Can I assume that we have settled this discussion?'

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She smiled warmly. 'Hopefully to the satisfaction of us both'

The following morning Catherine took the opportunity to take one of the boats for a personal visit to Hopa. They had agreed a search area for the day and a private contractor was managing the drone flight under the supervision of Klein.

Once ashore, she caught a bus to the shopping mall where she spent a couple of hours looking for clothes that were more suited to the humid conditions aboard the Explorer. Having arranged for her purchases to be delivered to the launch, Catherine chose to walk back to the harbour. She wanted to experience a taste of Hopa and the international mall hardly provided a flavour of Turkey. Catherine began her exploration with a steeply sloped street that led down from the newer part of the town, towards the distant harbour. It was a glorious spring day with temperatures in the mid-twenties, yet she noticed that many of the locals were dressed in jumpers and coats. Even though she was wearing a thin summer dress, her trainers were making her feel unbearably hot. They had seemed a sensible choice for walking around air conditioned shops, but now she was not so sure.

This part of the town was a little disappointing, hardly different to any other European or US town for that matter. Modern, box-like glass and steel edifices provided little indication that she was now in Asia. It was only when the pre-recorded calls to prayer, wafted up the hill from the minarets below, that Catherine started to feel she was truly in a new country. As she approached the mid-point of the

hills, the buildings began to age and grow a little more interesting. Glass was replaced by painted walls and shuttered windows. Small cafes and shops huddled around shady squares set away from the main road. Old men stood outside chatting to any passer-by that might prove to be a potential customer.

As Catherine approached the oldest part of the town, the streets levelled and assumed the appearance of a functional working port. Paint peeling blocks of flats and offices mixed with more modern buildings. Hopa could not be described as pretty but it had a certain charm.

At an intersection next to a small mosque, the distant smell of cooking reached Catherine's nostrils and she realised that it was long past lunchtime. The scent seemed to be coming from a crowded alleyway, and as she pushed her way through the melee of local people, Catherine found herself in a cavernous blue tiled souk. This was not like the labyrinthine tourist markets she had seen in Istanbul. This was what she had really come to see. Tucked within each alcove was a trader selling a bewildering variety of goods from cheap jewellery to exotic spices piled high on tables or overflowing from earthenware jars. She quickly learnt to look only as she slowly walked past rather than to pause. Any sign of interest was instantly seized upon as a commitment to listen to five minutes of hard sell that would embarrass a Texas second hand car dealer.

Further on, Catherine encountered an area dedicated to fruit and vegetables. This was a god send to a vegetarian facing the prospect of providing their onboard chef with ideas for food beyond cauliflower cheese and vegetable lasagne. Next came a fish market with a greater choice of seafood than she could comfortably deal with. As Catherine tried casually to discern a species that looked as if it belonged to a computer generated game, she became aware

of a hand clutching firmly at her elbow.

'Mrs Sands.' The voice belonged to a large man who by his accent was clearly a fellow American.

'Will you please let go of my arm.' Catherine tried to pull herself away but the man simply tightened his grip.

'I would appreciate it if we could talk somewhere quiet.'

'Would you,' Catherine replied indignantly, 'and I would appreciate it if you leave me alone before I call the police.'

The man did not bat an eyelid. 'I do not think you would want to do that.'

'And why not?'

'Because you will be interested in what I have to say. There is a small park just outside where we can have some privacy.'

The man let go of Catherine and began to push his way through the crowd towards the nearest exit. As they emerged from the souk, Catherine found herself in a small but well-kept garden area which appeared to be popular with the older local people. On one side was a café that had half a dozen chairs and tables outside. A number of these were occupied by pensioners drinking their Turkish coffees and playing backgammon.

'Can I buy you a coffee?' The man asked.

'You may and you may also tell me your name.'

After the rough introduction, the man abruptly became the epitome of a well-mannered gentleman. He ushered Catherine to a chair before hailing the attention of a waiter and ordering two coffees.

'I apologise for my behaviour earlier, only I was surprised to see you. I thought you would be aboard the Explorer for some time. As to my name, I am Matt Peterson.'

'Why are you so interested in talking to me?'

'Because of why you are here.'

'You have an interest in archaeology?' Catherine

questioned.

The man smiled patiently.

'I think we both know that is not the real reason for your presence in Hopa. You have been sent by JMRMU.'

'You are miss-informed.'

'No, I think not. JMRMU is mainly concerned with potential threats to military security. That means you are on a fishing trip to find out why Zidane retired and whether there is any reason for them to be worried.'

'You seem to know a lot more than I.' Catherine replied.

'I wonder.' Peterson mused. 'I will not do you the discourtesy of asking what they told you but I assume that they at least mentioned their interest in the chameleon technology being tested by Explorer Two.'

'As I said, I am here to lead a field study into the origins of an artefact.'

'Mrs Sands.' He stopped himself as a waiter approached with their coffees.

'It's Ms actually. I am not married.'

'My apologies, Ms Sands. I will come to the point. I work for Zidane Industries. My employers are very concerned that an unjustified interest in the reasons behind Zidane's retirement may hinder future business. We are just as concerned as your government about what Zidane is doing here. We believe no more than your people, that after nearly thirty years of single-minded dedication to building the business, he has suddenly developed an interest in digging up bits of old pottery.'

Catherine took a sip of her oversweet coffee and shuddered. 'Mr Peterson. I have been very patient but I now have to leave if I am to catch my boat. It is clear to me that you have been fishing yourself. When you have something to offer, you know how to contact me.'

Catherine stood up with slow deliberation and began to

walk away, trying to portray an air of calmness she did not feel. For several minutes, she listened carefully for any sign that Peterson was following, and it was not until she rounded a corner that led to the harbour, that she began to relax.

By the time the street levelled out Catherine began to realise that she still had not eaten and the boat trip was a long one. Catherine checked her watch. It was half past three and that left just enough time to grab something and still make the launch. As she looked around Catherine noticed a small grubby looking café that was evidently popular with locals, a good sign according to all the travel guides.

It was an old fashioned looking place with a blue tiled floor, smoked stained walls from a time before smoking had been made illegal and was crowded with red and white checked tablecloths. Catherine sat down and a large, dark haired woman made her way towards her.

'Welcome to my café.' She said in a broken English accent that was clearly not Turkish. My name is Luba. What can I get you?'

'Something local and vegetarian?' Catherine answered hesitantly.

'You are tourist?'

'Not quite. I am going to be working here until the autumn.'

'Then welcome to Hopa. I hope you enjoy your stay. I think you like Balik Koftesi. It's very fresh, caught this morning by our own boats.'

'Thank you, that sounds very nice.' Catherine smiled weakly whilst wondering how they could catch a vegetable.

As Luba returned to the kitchen, Catherine began to look around and her attention was caught by an old LED screen fixed to the ceiling above the bar. It had been a very long time since she had seen one of those and it was showing some sort of sporting event. Intriguingly this was not an internet channel but a broadcast television station. She had not realised that there were any left. After a few moments, the fascination waned and Catherine took out a magazine from her bag whilst she waited for her food to arrive. It was then that a Chinese looking man sat down at her table. She found this a little uncomfortable as there were plenty of empty tables.

'You are Catherine Sands?' The man asked hesitantly in excellent English, which he spoke in a strange un-Chinese accent.

Catherine groaned inwardly. She had had more than enough of perfect strangers knowing who she was.

'I am but I would appreciate if you could leave me alone.'

'Forgive me please, but I have come a long way.'

'Yes, so have I.' Her reply was tinged with resignation that she was about to face another unwanted conversation.

'I know why you are here.'

'Good. Then I assume that is the end of the questioning.'

'You are here on behalf of the American Government to find out whether Andre Zidane is here for any other purpose than an archaeological one.'

'If you do not leave me alone, I will complain to the owners.' By now, she was beginning to feel very annoyed at his persistence.

'I can help you if you can help me.'

'You have one last chance.'

'Zidane is looking for a device that can channel subatomic particles, which you would call pucks.'

'OK! Don't say I didn't warn you.'

'I see that means nothing to you but it will to Colonel Craig.'

Catherine stopped herself as she was about to call for

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Luba. She stared at the man for a moment as she quickly pondered how to respond. It seemed pointless to deny what was beginning to look like anything but a secret.

'Tell me more about this device.'

'Not for the moment but I will when you have spoken to Craig. I will find you.'

'Just a moment,' Catherine called out as the man was about to leave, 'you have not told me your name.'

'Yes of course. Sorry. It's Chen Xiaodong.'