

THE RESEARCHER



A publication of the Merseyside Anomalies Research Association

“Interpretation is free, experience is sacred.”

Vol. 2 Issue 1 Winter/Spring 1998/99

John Lennon on the roof of his east 52nd street apartment New York 1974.
The UFO passed between John and the building in the right corner of the photo'



Photograph courtesy of Bob Gruen

There's UFO's Over New York and John Lennon Wasn't Too Surprised
Or Why I Hate December. *By Larry Warren*

A Trip to RAF Menwith Hill

An Out of Body Experience

Remote Viewing Experiment

Beware-Hoaxers at Work

An Urban Myth: The Cuedly Dragon

And much more....

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About MARA

The Merseyside Anomalies Research Association (MARA) was founded in February 1996. It is a non-profit making organisation whose aims are to encourage, promote and conduct unbiased objective investigation and research into UFO/paranormal phenomena. MARA provides non-financial support for undergraduate and post-graduate research into anomalous phenomena.

MARA consists of an informal group of people of all backgrounds and a variety of ages over 18. The group limits itself to a relatively small number of people, composed of individuals with mixed backgrounds who want to actively investigate and research UFO/paranormal phenomena within the Merseyside region. We do not give public lectures at our regular meetings, but often present lectures or talks for other groups and societies. Membership application to MARA is free and space permitting, is open to any interested individuals. The Association is jointly run by its group co-ordinators who are amateur investigators and researchers in their spare time, and members of well known national organisations. They are responsible for any major decisions involving the group in addition to the association's membership, activities, functions and research.

It is a policy of the organisation not to have any fixed beliefs and to remain apolitical. However, the organisation is not responsible for the opinions expressed, or implied, by guest speakers, items within The Researcher, or by any arbitrary views of the Association's members. MARA is affiliated to the British UFO Research Association, Northern Anomalies Research Organisation, The Northern UFO Network, the Incorporated Society for Psychical Research, Halton FM UFO Factor, Merseyside Area Paranormal Society and works with the Association for Scientific Study of Anomalous Phenomena, the Wirral Paranormal Investigations and the Society for the Investigation of Paranormal Activity.

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About The Researcher

This publication serves as a voice for MARA members who want to write about their research and interests in anomalous phenomena. We will also print letters from readers and include articles and advertisements belonging to those people who are not a part of MARA but who would like to contribute their research to this small publication. It will not involve payment for the article but it will mean that your article will be read by a larger number of people involved with UFOs and the paranormal. Please send your letters and articles to Anthony Eccles at the address above. Keep it clean and objective, know what I mean? MARA reserves the right to edit all articles as necessary.

The Voice

Editorial by Bill Bimson

I am pleased to welcome Larry Warren as a guest writer in this edition of *The Researcher*. Larry's own UFO experiences and his knowledge of UFOlogy are an asset to the magazine. His article is about John Lennon's UFO experience in New York. It feels strange to have an American author who has had an amazing UFO experience himself in the UK, writing for a Merseyside based magazine about a famous Liverpudlian's UFO experience in the USA. But then, UFOlogy is a strange subject and synchronicities should be expected.

We have had to change to black and white for all of our photographs due to rising colour production costs but I am sure you will realise that the most valuable part of the content of this magazine is in the text and so you should not be too disappointed. If the magazine ever takes off so that we are producing thousands of copies, we will be able to afford to have them printed in colour, but for now we are sticking to what we can afford to photocopy.

I am pleased to announce that MARA has started its own research programme into remote viewing (RV) which is covered in an article by Mark Glover. RV is a controversial subject with many claims and counter claims being made by various researchers. In MARA's first experiment, one of our members had three positive hits out of five targets! However, MARA will not claim to have proved RV works until we have proof that can be published in a peer reviewed scientific journal. This will, of course, mean a large number of reproducible results under scientific scrutiny using our academic contacts. Why should MARA succeed in this venture where others have failed? I believe we have a chance because groups like MARA attract some people who have a higher than average level of psychic ability. This is not the same as just having an interest in psychic ability such as myself. It would be easy for a sceptic to claim that the first experiment was due to beginners' luck and to that end we are not in a position to argue. In the coming months we have two more RV experiments planned so watch this space and good luck to everyone on the RV team.

There has of late been a large number of TV programmes of varying quality about the subject of UFO's but it has to be said that some of the so called sightings are quite laughable and an insult to the average viewer's intelligence. There was one in particular which was about as believable as Father Christmas to an adult. Someone was driving along in a car while videoing either Venus or Jupiter and claiming that when he speeds up so does the UFO so it must be following him. Having said that, there has been some good video footage shown such as that from the space shuttle where an object which some would have us believe is an ice crystal suddenly reverses direction to avoid a projectile fired from earth. It's a shame that these programs don't concentrate on the good footage and abandon the dross.

MARA is hoping to have an active weekend outing programme this year after last years successful trip to Avebury. With earlier planning, we hope to have more than one weekend trip and possible day trips to observe places like the British Aerospace plant at Warton for new military aircraft which are often mistaken for UFO's. We will keep within the law during these trips (no commandos please). Another possibility is a MARA visit to an air display. This will at least make our members familiar with modern military aircraft shapes and capabilities, but of course we will not see those of the most secret nature. The F117 Stealth Fighter was flying in this country before it officially existed and it is quite likely that another "non-existent" aircraft is operating out of Warton now. While the military probably don't plan UFO stories to cover up secret aircraft operations, they probably welcome them if they are generated by over keen UFOlogists.

All in all, I am confident that this year will be an extremely active one for MARA and I look forward to those activities being reported in this magazine. Remember this is your magazine and if you would like to write an article please get in touch, our contact details are on page three. You don't need to be a member of MARA and you don't have to have access to a computer, so long as we can read your handwriting.

There's UFO's Over New York and John Lennon Wasn't Too Surprised Or Why I Hate December

By Larry Warren

With this being my first contribution to *The Researcher* and considering this publication originates in the great city of Liverpool, I thought I'd write about John Lennon's August 1974 UFO experience. I had first-hand knowledge of this event because I knew May Pang, Lennon's assistant and companion during his infamous "lost weekend". May was with John Lennon when the UFO sighting occurred. And maintained a vivid recollection of it. Over the years I've seen Lennon's sighting misrepresented by writers in various books and magazine articles (either because of the writers ignorance of the facts or unease with the subject matter). I have also experienced the same thing as have many other high-profile UFO witnesses, and look forward to the day when many UFO researchers and writers become a bit more professional in their work. For now, let's set the record straight on this event.

In the summer of 1988 I had an opportunity to speak with May Pang about her and Lennon's experience while sitting in her New York city apartment, surrounded by artifacts of May's time spent with one of the most famous people of this century. Over the apartment door hung the old style New York City street sign that John found and brought home. On a table, a silver-framed photograph that May had taken of Lennon, lying in bed with his two cats called "Major and Minor". The ceiling to floor mirrors he bought to make their East 52nd street apartment living room look larger. Most notably, I saw the gold record presented to John Lennon for his introspective album "Walls and Bridges", and it was this record that Lennon was recording when he had his amazing UFO sighting. Fourteen years had passed since the event, however, to May Pang, it was as if it had happened yesterday.

It was a typically repressive late summer evening in New York City, with air so heavy you could almost cut it with a knife. John Lennon and May Pang had just

returned home to their east 52nd street apartment building, after spending a long day at the Record Plant East recording studio, where John was immersed in the final mix down of the *Walls and Bridges* album. Lennon loved the 52nd street address as it was only one building removed from the East River, and the view from their top floor apartment over to the docks of Brooklyn and the navy shipyard reminded him of Liverpool. Another point of interest for John Lennon was the fact that the reclusive actress Greta Garbo also lived on the block and he hoped to catch sight of her.

The night of August 23 was no different from any other that month for John and May. John made and received phone calls, watched TV and listened to the day's recorded work while making notes. May Pang recalls that the apartment was hot that night, but by 8 o'clock the night air had cooled off enough for her to have turned off the air conditioning and opened the windows to get a breeze off the river. Just off the apartment's living room was a part of the building's roof which also acted as a private observation deck, with a great view of east New York. Access was only granted by climbing out of a window, which Lennon often did. The haze had now cleared over New York's skyline. At about 8:30 p.m., May decided to take a shower, leaving Lennon alone in the living room reviewing mock-ups of his new record's cover. The cover art on the final product would be a painting by a 12 year old John Lennon. A short time later, as May was drying off, she heard John yell to her from the outside roof, "May come here right now!" Startled, she ran to John's aid finding him standing on the roof nude and pointing wildly southeastward. As May remembered, finding John Lennon nude on the roof was not a surprise, as he had no aversion to wallowing around in that condition. What did surprise her was what he was pointing at. Just south of the building now was a brightly lit "classic" circular UFO, floating silently and less than 100 feet away from the couple. As John Lennon would later describe, "I wasn't surprised to see the UFO really, as it looked just like the spaceships we've all seen on the cinema growing up, but then I realised this

thing was real and so close, that I could almost touch it!". As they watched, the UFO moved silently away. May told me that the lighting on the thing left them awe-struck, as it would change its configuration with every rotation. The object made no sound. The main structure of the craft could also be clearly seen for the duration of the event, due to the last remnants of the still setting sun. May ran back into the apartment and grabbed a 35mm camera, and once back on the roof both she and John took numerous pictures of the craft. May remembers John's arms outstretched as he yelled at the UFO to come back and take him away! "He was very serious and I believe he really wanted that thing to take him with it back to wherever it came from, but then that was John Lennon, always looking for the next big adventure". Soon the object passed the United Nations building and slowly veered left, crossing over the East River, then over Brooklyn and soon the UFO simply blended in with the heavy commercial air traffic in southern Long Island. John Lennon and May Pang, both shaken by the experience, climbed back into the apartment. John picked up the phone and called up his friend and noted rock photographer Bob Gruen. Lennon told his friend to come over as soon as possible as he had some film he needed developed urgently! As they waited for Gruen to arrive, John began making sketches of the object he had seen, noting its size and distance. Then John called Yoko Ono at the Dakota apartments to tell her about the UFO and as May remembers it, Yoko became upset at John, because she hadn't seen it too, and felt that he had "left her out of all the excitement".

Finally Bob Gruen arrived and John told the photographer what had transpired. Gruen later recalled "I took the film home and put John's roll between two rolls of film I'd taken earlier that day and developed them". "My two rolls of film came out perfectly but John's roll was blank. Later I asked him "did you call the newspaper?" and he said "I'm not going to call up the newspaper and say, This is John Lennon and I saw a flying saucer last night"... So Bob Gruen called up the local police precinct and asked if anyone had reported a UFO or

flying saucer. The police responded with "where? Up on the East Side? You're the third call on it". Then Bob called the Daily News and they said, "On the East Side? Five people reported it". At last, Bob called the ultra conservative New York Times and asked a reporter if anybody had reported a flying saucer? The reporter hung up on him.

Neither John Lennon nor May Pang would ever forget their UFO experience, but then again, how could they? This very real phenomenon changes and effects everyone touched by it, whether rich, poor, famous or not, it effects us all. Though John Lennon was hesitant to report his sighting to the media, he nevertheless took a stand concerning the sighting. When his album, Walls and Bridges, was released in the Autumn of 1974, any fan would see the notation on the booklet that accompanied the record. On the bottom right of the back cover it reads "On 23 August 1974, I saw a UFO J.L.". That simple statement meant a lot to many of us who read it. Most "flavour of the week celebrities" would never have had the nerve, but John Lennon was different, he had substance and was not afraid to take a stand. He was an inspiration to many people and perhaps that is why we still feel the sadness and loss due to his murder in 1980.

After speaking with May Pang about the UFO sighting with John, reading his extensive notes and studying his drawings, I was left with no doubt that John Lennon would have made one hell of an objective, thoughtful and professional UFO researcher. God knows, we need him now more than ever. May pang played an audio tape for me that John had recorded a few weeks after his experience. On the tape he discusses his thoughts on the UFO subject in general. I took notes and fully agree with his conclusions. In brief, Lennon states that he had no doubt that the craft he saw was from another world and discounted that it could have been a secret government test plane. That argument was stupid in 74 and it's still stupid now in 99. John Lennon also felt that the craft he saw was part of a much larger fleet stationed just north of New York city, up in the area of the nuclear power plant at Indian Point. A side note: that area is and has been for many years a UFO hot bed, see the book "Night Siege". This area is the heart of the Hudson Valley "giant triangle" sightings and some have been described as

being the size of three football fields. Government experimental craft? I think not. The people who promote these ideas should stand under one of these monsters, I'm sure they would be humbled.

John Lennon went on about his theory of how these craft use the earth's gravitational field and take energy from nuke plants to counter the earth's gravity. In the book I co-authored with Peter Robbins called "Left at East Gate", I also write about some amazing sightings I had while living in New York. In fact, it is a rather common occurrence for many people, (not just farmers)... Lennon also voiced his opinion and suspicion of a high level conspiracy to cover up verifiable UFO sightings and close encounters with aliens. He continued that "if the masses started to accept UFO's, it would profoundly affect their attitudes towards life, politics, everything". John explained, "It would threaten the status quo". "Whenever people come to realise that there are larger considerations than their own petty little lives, they are ripe to make radical changes on a personal level, which would eventually lead to a political revolution in society as a whole". Right on John! Peter Robbins and I have been trying to promote that point of view for the last ten years and I personally have been doing it for nearly eighteen, but I often wonder if anyone is paying attention? The following day May Pang asked me to help her organise many of John Lennon's personal effects that she still retained, as a rep' from Sotheby's auction house was coming over that week to assess the value of the items for insurance purposes.

In a box I found numerous dated copies of the British UFO journal "Flying Saucer Review"(FSR). All were addressed to John Lennon. I was surprised because I thought the 1974 sighting was John's first introduction to the world of UFO's, but the FSR's dated back to the late 60's. I asked May if John had an earlier sighting he might have mentioned?... As she carefully folded the black velvet suit he had worn on stage with Elton John in November 1974 at Madison Square Garden, May replied "Oh

no, 74 wasn't John's first sighting". "In fact he told me that more than once he suspected he had been "abducted" as a child back in Liverpool!" "And he felt that experience was responsible for making him feel different from other people for the rest of his life". "Abducted" I said. "You mean by aliens?" May Pang answered. "Yes, but John didn't go into detail about it". I was stunned, but that's another story...

December 8th 1998, late evening and I've managed to finish the first serious attempt at writing I've made since I wrote the last chapter of Left at East Gate, and it's great to be back at it.

Two days ago, an auction house offered an autographed copy of John Lennon's last record "Double Fantasy" for sale. I don't know if it was sold or not. Christ, it was estimated to go for 1.4 million US dollars. I have to say that the sale of this particular piece of memorabilia makes me sick to my stomach, as the album was signed by John Lennon to a fan whose name he would never know, but we all do. The date was December 8th 1980 and the fan was Mark David Chapman. Maybe something good will come from the sale of the record, I keep telling myself, perhaps the owner of the damned thing will donate a portion of the profits to benefit stronger hand gun control via the spirit foundation, John Lennon's charity. What the hell am I thinking? In America in the 1990's, money rules, and the heart has no place to call home, and that's the flipping truth.

Two and a half weeks after John Lennon's assassination, I briefly thought of him while blindly walking thorough a pitch black forest in southeastern England, and eighteen years later his final words to reporter David Sholin of RKO radio spoken only hours before his death still cross my mind. "Who knows what's going to happen next?" Well folks, none of us do and that's why I hate December.

Larry Warren is a well-known lecturer on the international UFO conference scene and has co-authored a book called Left at East Gate. The book covers many of his UFO experiences along with the associated government and military cover-ups.

An Out of Body Experience

By Sue & Nora McAllister

Sue

My mother and I talk about many different issues including the paranormal which we have both been interested in for many years and we sometimes share psychic experiences. My mother told me one day of an experience she remembers about 49 years ago! In her own words this is her story-

Nora

I am a 55-year-old grandmother and I had an out of body experience (OBE) when I was about six years old. The whole experience is as vivid in my mind as if it were yesterday. I was ill in bed with breathing problems (today, it would have been diagnosed as asthma) and my mother had called out the doctor who proceeded to examine my chest. As he stood up to talk to my mother, I suddenly found myself up in the corner of the room. I saw myself lying on the bed and the doctor and my mother standing by the door talking. I could hear every word they were saying. He was telling my mother that a warm climate would be beneficial to my health (We emigrated to Australia not long afterwards). I watched the doctor walk down the stairs with mum and I had a good look around the room. I remember a feeling of curiosity but I wasn't frightened, it seemed like a natural thing to be happening somehow. Then, suddenly going back to my body and calling out to my mum. I didn't tell her about this at the time, in fact, I never told anyone until I told my daughter last year. I called my mother a few weeks ago and she confirmed that I was quite ill when I was six and the doctor recommended a warm climate to help with my chest problems. She was quite shocked when I repeated the conversation word for word and when I told her about the OBE, she looked at me as if I were crazy.

I never told anyone when I was younger because I thought it happened to everybody, then as time goes on you don't tell anybody in case they laugh at you. An OBE is nothing to be frightened about and I wouldn't mind if it happened to me again. In fact I wish it would!!

Sue

On the 27th November 1998 I attended with my mother, Dr. Peter Fenwick's lecture about the Near Death Experience (NDE) at the Liverpool Hope University College, organised by Mark Glover to raise funds for MARA. Dr. Fenwick showed different cases of NDE's that were fascinating to both of us. Dr. Fenwick's research showed that many people who have had an NDE, often become aware of a bright light which they are drawn to with an overwhelming love within it. The statistics were very interesting and showed that religion was not a factor with NDE's and OBE's. I say OBE because even though many reported cases are from people who have been "near death" e.g. during major surgery, not all of them are. Some people claim to be able to leave their bodies at will after relaxing into a meditative state, and they even claim to be able to travel back and forth in time. Another example of this is "remote viewing" which is a trained psychic ability supposedly used by the CIA. The purpose was to see if the subject could "project" themselves to different locations, often thousands of miles away and report back on what they "saw".

Anyway that's another subject! I believe that the 'energy'-'spirit'-'soul' or consciousness (whatever term you prefer to use) within us all has a power to exist beyond our physical bodies or leave our physical bodies at times of trauma. The powers of the human psyche have still barely been explored. Who knows what the future will bring. Maybe our physical bodies will never have to leave our homes, only our "energy" will, and all our work will be done through computers and robots! What a thought!

Another thought to be leaving you with, during "personal contact experiences" with aliens, some are said to appear through windows and walls. Do they use their psyche to leave their bodies at will? The more we study these subjects the better our understanding will be, instead of seeing them as bizarre or paranormal or crazy!

Remote viewing absolutely fascinates me and I would like more information on the subject from anyone willing to share it. I can be contacted via e-mail at bimson@liverpool.ac.uk or through the MARA co-ordinators whose details are given on page 3.

The Good, the Bad and the Downright Ugly - a look at the how the media portrays the subjects of UFOs and the paranormal.

By Anthony Eccles

This article is primarily a response to a journalism student at university. Jonathon Dillon asked me for my opinion about how I thought the media tackles the subject of the paranormal, both on a national level and also on a local level where my research has come into contact with the media itself. It is interesting to note too, that working in a national museum with prized collections has also drawn my attention to a similar problem of perception in how the public views the different galleries within the museum or the countries the artefacts portray.

A classic example, I suppose, would be Africa as a continent. A stereotypical image most people have of Africa would sometimes come out of a Tarzan or King Kong movie, where everything is depicted as dark, the people, the homes, their culture and their land. Yet Africa as a continent is rich in culture, rich in a huge variety of land, language and colour.

The similarity between stereotypes of outside cultures and that of the paranormal is clear. Images associated with the subjects have been influenced by the different forms of media, such as the newspapers, radio and television. Yet the media, at certain times in the past, have played a vital role in providing the public with factual information. For example, the front line effort of the Second World War. However, even at this time, the media was full of propaganda to influence public opinion. Often pressure groups and the media were one and the same, and they would act to influence those in power and/ or those who voted them into power.

Politics aside for a brief moment, strange phenomena has always been of interest to the public, but it is the way it has been portrayed over fifty years that has created today's public attitude regarding the phenomena.

Ask yourself this. What words come to mind if I were to mention the acronym "UFO" and the words "alien" and "abduction". Many people who have not experienced anything unusual might think of the labels "loonies", "idiots", "nutter", and "geek" etc. The image of a UFO researcher is usually of a socially backward individual wearing glasses and untrendy clothes, an image not too far from that representing stamp collectors, train spotters etc. The significant point to raise here is where do these stereotypes come from?

These stereotypes appear to stem from what people read in the newspapers or see on the television (and now the Internet), the most common forms of mass communication in Western society today. Subjects with a high popularity status, such as football and pop music, do not appear to have such strong stereotypes with which to ridicule those who are entertained by and involved with the subject.

Why is this so? I feel that the paranormal offers such a strange and frightening aspect to it that many people who come across it do not know how to accept such subject matter into their own personal lives. Obviously, not everybody has enough experiences on a day to day basis to acknowledge it as normal, otherwise it would not be labelled 'paranormal' or 'weird' but, instead, 'normal', 'regular' and maybe even 'boring'.

I want to examine the origins of such stereotypes by going back to a period of time I would call "The Beginning of the Popular UFO Sighting". This is a time just after The Second World War when the world had entered a new era of scientific understanding, the atomic age, and this era opened up certain possibilities that had at one time been considered highly unlikely, such as space travel.

Unusual aerial phenomena has been reported, certainly in the late nineteenth century, when national and local newspapers had started to pay attention to the growing numbers of witness testimony concerning the sudden appearance of the mysterious 'airships'. Of course, airship technology was to start at the turn of the century and certainly a number of witness accounts can be explained as experimental airship flights before they had become the latest form of long distance transport, such as the von Zeppelin's first flight in 1900.

However, not all sightings were easily explained. One example took place in Texas in 1878 when a farmer had reported seeing a dark disc-like object flying over his farm.ⁱ The press at this time had focused more on the multiple witness sightings of shiny cigar shaped objects. On the 15 April 1897, the *Argus-Leader* in Sioux Falls, South Dakota had printed a report which was under the dateline of Springfield, Illinois.

*"Farm workers Adolph Winkle and John Hulle signed affidavits stating that an airship had landed two miles outside Springfield to repair some electrical apparatus on board. The farmhands said they had talked to the occupants of the machine, two men and a woman, and were told it had flown to Springfield from Quincy, about 100 miles, in half an hour."*ⁱⁱ

Here, the witness's story was printed without any accompanying satirical cartoons reflecting cynicism of the

witness's accounts, nor are there any adjacent comments made by an astronomer or other 'scientist' to state that what the two men had seen could easily be explained away. So far removed is this account from any widespread belief in a contact with *extra-terrestrials* that the men's testimony is plainly documented. Note that the article mentioned insinuates that the two men are not liars because they have signed affidavits, and taking their word, reports their story as being the truth. One further point is a minor detail that remains in the men's story. If their account is true, then we can say how highly strange their experience must have been, because;

1. The Wright brothers did not fly until 1903, six years after the airship had been seen.
2. Count Zeppelin's airship could only travel at a speed of around 25 mph. This meant that the object observed by the two men could not have travelled one hundred miles in half an hour. The same aircraft could not have been seen in Quincy half an hour later as reported by another set of witnesses for that would make the craft's speed to be 200 mph, an impossible speed for any aircraft at that time in history.
3. If they had seen an experimental airship, since when have women, in the late nineteenth century, been allowed on experimental craft as a member of crew?

Another example of journalism at that time had revealed a bizarre event, but again the newspapers had reported the event as it apparently happened without any sceptical line of enquiry. It was as if the newspaper was treating the story as if it really happened.

On April 19th 1897, the *Dallas Morning News* had carried the

following news item that had come from Aurora in Texas.

“Early risers of Aurora were astonished at the sudden appearance of the air ship which has been sailing throughout the country.

It sailed directly over the public square and, when it reached the north part of town, collided with the tower of Judge Proctor’s windmill and went to pieces with a terrific explosion, scattering debris over several acres of ground, wrecking the windmill and water tank, and destroying the Judge’s flower garden.

The pilot of the ship is supposed to have been the only one aboard, and while his remains are badly disfigured, enough of the original has been picked up to show that he was not an inhabitant of this world.

Mr. T. J. Weems, the U.S. Signal Service officer at this place and an authority on astronomy, gives it as his opinion that he (the pilot) was a native of the planet Mars...

....the town is full of people today who are viewing the wreck and gathering specimens of strange metal from the debris. The pilot’s funeral will take place at noon tomorrow.”ⁱⁱⁱ

What an amazing news story! Coincidentally enough H. G. Wells’ *War of the Worlds* was published that very year! Regardless of this it is interesting to see that the press had taken this story so seriously, no debunking line of enquiry had been made then as it would be done today. It was obviously a time when early stories of science fiction might have possibly influenced people’s perceptions with interpreting the very types of anomalous phenomena where decent attempted explanations can be given by today’s science, such as ‘earthlights’.

This early journalistic attitude was to change throughout the duration of two world wars. The second war had not escaped its share of unidentified craft. Large numbers of allied craft

had reported seeing balls of fire that appeared to fly on a parallel course with the aircraft, either keeping a safe distance behind or ahead, or buzzing the aircraft with spectacular aerial manoeuvres that defeated logical explanations. These became known as ‘foo fighters’ (a term originally derived from a Smokey Stover comic strip where the character had said “where there’s foo there’s fire”).

These flying fireballs had been seen both day and night and the press had printed a number of these accounts. One such account had appeared in *The New York Herald Tribune* on 2nd January 1945.

“On December 13, 1944, newspapermen were told that the Germans had thrown silvery balls into the air against day raiders. Pilots then reported that they had seen these balls, both individually and in clusters, during forays over the Rhine....

Pilots have been encountering this eerie weapon for more than a month in their night flights. No one apparently knows what this sky weapon is. The balls of fire appear suddenly and accompany the plane for miles. They seem to be radio-controlled from the ground, and manage to keep up with the planes, flying at 300 miles an hour, so official intelligence reports reveal.”^{iv}

The foo fighter became more intriguing when Germany had been defeated and the allied forces had access to German military documents. To their surprise, they had discovered that the German aircraft, too, had been harassed by the *Feuerball* (German term for foo fighter) and that they had believed that the machines were actually an allied secret weapon! Note though, that the story was corroborated by an official source, and that was only because the foo fighters were believed to be a new enemy weapon. But what if the foo fighters were believed to have been

paranormal? I doubt that even the story would have had the support from an official intelligence source.

By the end of World War Two, the atomic era had started, the media was reacting to the popular public interest into new sciences, the concept of space exploration, the explosion of science fiction novels and movies, the expansion of human creative imagination and, unknowingly, the final separation of the Western world from religion and spirituality.

Although 'Ghost Rockets' were being investigated in Sweden in 1946, the following year would prove to be the start of the *Flying Saucer* era. Two main events had caught the excitement of the public, the first was in June 1947. Kenneth Arnold was flying his small plane looking for the wreckage and possible survivors of a crashed military transport aircraft in Washington. Just after turning from the south-west slope of Mt. Rainier, Arnold caught sight of a bright flash of light in the distance from a number of crescent shaped aircraft which were flying in a V shaped formation, like a flock of geese. Arnold was able to calculate their size and speed. The aircraft were approximately forty feet in length and flew over a thousand miles an hour. His calculations were only an estimation but he radioed back to the ground and upon his return the press had gathered to hear his story.

It was Arnold's description of how the objects flew that enabled the press to coin the phrase we know today as *flying saucer*. Arnold had only described the aircraft's movement as being "like a saucer would if you skipped it across the water." The media had done the rest and the flying saucer season was about to begin.

In July, the following month, something happened in New Mexico that was to not only become a heavily debated incident by ufologists but it

also becomes an excellent example of how the media covered the event.

Without going into much of the already exhausted coverage of the case, I shall discuss in the next issue how the incident at Roswell gave rise to the manipulation of the media in an attempt to play down the public interest into UFO phenomena.

¹ Spencer, J. 1991 *The UFO Encyclopedia*
London: Headline Book Publishing Plc
pp.31.

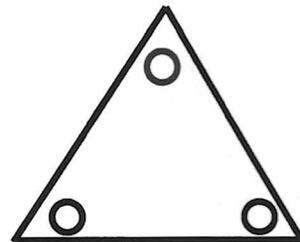
¹ von Buttlar, J. 1980 *The UFO Phenomenon*
London: W. H. Allen & Co. Ltd
pp. 47

¹ Steiger, B. & Whritenour, J. 1976
Flying Saucers Are Hostile
London: Tandem Books
pp. 92 - 93

¹ Yenne, B. 1997 *U.F.O. Evaluating the Evidence*
London: Grange Books
pp. 20 - 21

Can you help us with our
research?

M.A.R.A. has collaborated with a number of groups with regards to reports of sightings of flying triangles over Merseyside. We already possess a number of local cases and would like more witnesses to these objects to come forward.



If you have had sightings of these triangular craft then please do contact us. See details on page 3.

A Trip to RAF Menwith Hill

By Julie Boyd

On Sunday 3rd January 1999, Bill McGarry and myself took a trip to North Yorkshire to take a look at Menwith Hill, a strange-looking complex situated about 7 miles west of Harrogate and nestled between Ilkley and Otley. We left sunny Liverpool at about 11.30 a.m. until travelling through the very misty and dark environs of the foreboding West Pennines (window area?), up through Bradford, we eventually found our route towards Ilkley and Otley. Staff at a nearby Little Chef Restaurant had never heard of Menwith Hill except for one young man who told us to take the Pately Bridge route which is actually sign-posted in Otley town. We drove up through the country roads for a while and then looking to my right, there it was – lurking amongst the fields down in a valley. An eerie collection of curious white domes, (22 in all), a sight that seemed more reminiscent of a scene from out of “The Avengers” (the original Steed and Mrs. Peel series). We drove down a track before stopping so we could get out and look through binoculars. I wanted to take a closer look so we drove back onto the road before turning left onto a road that took us right down to the complex itself. It looks even stranger close up. The huge round white balls are actually massive satellite tracking devices. We drove past one of the main entrances, staffed by security personnel on the gate and marked with American and British flags. Other entrances we drove past were clearly closed to the public with Ministry of Defence (MoD) notices to remind us of as much. Officially, members of the general public are not allowed beyond the perimeter fence, as is the case with all MoD facilities. Stopping the car to take a closer look was not an option we felt happy to take. Although some individuals have photographed and even video taped the facility in the past, it is not something I would recommend due to the close personal attention that one might attract in the form of white security jeeps and light aircraft as happened to a group of UFO investigators at one time!

Background to Menwith Hill

During the 1950's, the plans for the base were first drawn up amidst the height of the cold war and it was actually built for the US Army. The North Atlantic Treaty Organisation (NATO) required a prime location to establish a communications centre to gather intelligence on Soviet activities in Europe and elsewhere. In the mid-1960's, Menwith Hill was officially manned by civilians, these being the National Security Agency (NSA). In 1973 Menwith Hill was modernised and given satellite communications capability after a decision made at the NSA headquarters at Fort Meade, Maryland, in the USA. A new unit within the service was initiated, known as Steeplebush to develop its space satellite programme. In the early 1990's Steeplebush II emerged and a third phase is already in operation.

During the last decade, the operations role of Menwith Hill has changed dramatically. From its original mandate of watching Soviet activity, it now concerns itself with gathering intelligence on terrorism, the movement of dangerous materials including Plutonium and has become involved in governmental decisions about British operations.

The Present Situation

The NSA is thought by some to be the most secretive intelligence agency in the world and is at the head of Menwith Hill's vast intelligence operation. Although most of its employees are drawn from the U.S. military, there are a smaller number of British personnel working on the site. The on-site satellite tracking dishes are the most sophisticated in the world, as are the eavesdropping machines which are housed deep within seven underground floors. The Menwith Hill facility is able to intercept hundreds of thousands of communications per second as the vast computers decipher and analyse key words. These computers are programmed to locate phrases and signals which are “abnormal”. Vital intelligence is often gathered in this manner and relayed back to Washington. Millions of telephone numbers have been banked and certain lines in the Middle East are monitored. This operation has been broadened to encompass the internet. British Telecommunications (BT) recently installed a new high-capacity

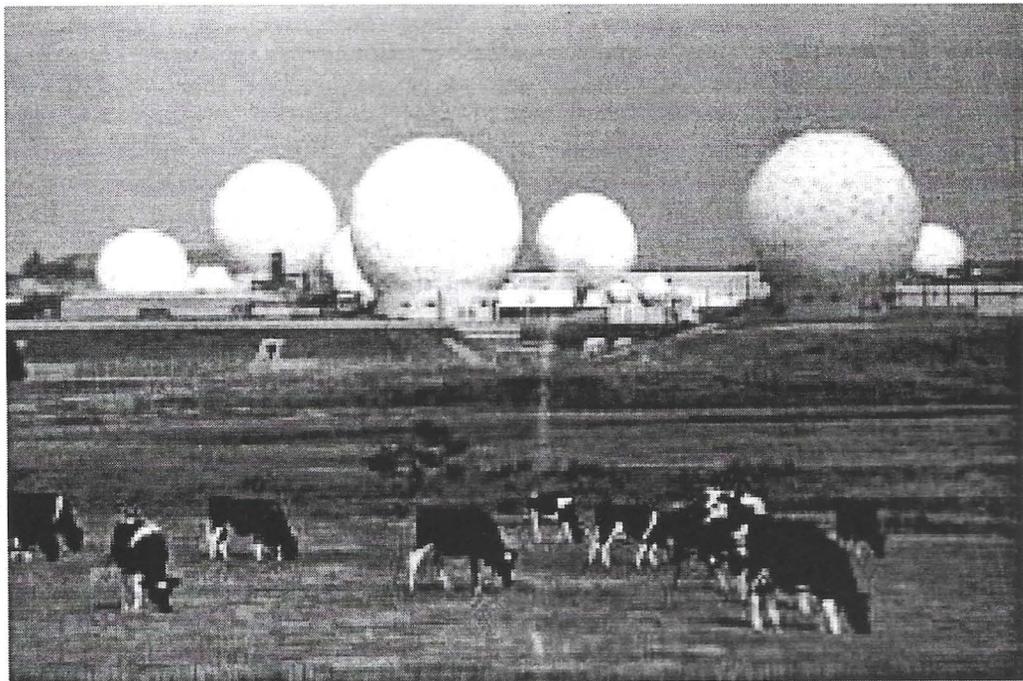
optical fibre line at nearby Hunters Stone, a BT microwave tower. The line can simultaneously handle 100,000 calls. Allegations have been made that the base was tapping into the BT network, although it has been known for over a decade that Menwith Hill occasionally uses the transmitter at Hunters Stone. For example if you were to make a telephone call from the U.K. to Paris, then the call would most certainly be routed through Hunters Stone. The use of a civilian network has caused concern not only to public action groups, but also to business and industry.

Menwith Hill has the capability to control the movement of certain space-satellites to deploy them at given times over "targeted" areas. Reconnaissance satellites are now so technologically advanced, it is possible to read a newspaper headline from space. New weapons developments and buildings in far off countries can be analysed and as more information is passed through the skies, the U.S. has continued to build 'spy satellites' to further increase its already powerful information gathering potential.

The NSA's European and Asian monitoring system is known as 'Vortex' (three Vortex satellites are positioned

over the equator). New satellites code-named ORION and MAGNUM have recently come on-line and are also controlled by Menwith Hill. Further information and intelligence are acquired from microwaves, telephones and faxes etc through a complex network of stations throughout the world known as 'ECHELON'. However, it is also a fact that not all information is shared with General Communications Headquarters (GCHQ) in Cheltenham. GCHQ is the British communications monitoring post for our own intelligence agencies. Close to the site, other military communications hardware can be seen and is often used by NASA's space shuttle operations. A lot more lies underground.

So here we have a facility which has trebled in size since the 1980's and has been connected with alleged UFO and men in black activity in the past. We took a break at a nearby lovely old pub called the Black Horse before taking a look at the base just as dusk fell, as we had heard that the complex gives off an eerie glow in the dark. I would say that it stands out better during the daylight. We did not witness any aerial activity (UFO's or otherwise!) but it was certainly an interesting look at possibly the world's most secretive listening base.... And remember, next time you make that call or use the internet, be careful, you don't know who's listening or watching!



RAF Menwith Hill

The Nature of Electricity, Magnetism and Gravity

By Bill Bimson

Introduction

This article is an introduction to the nature of electricity, magnetism and gravity and how the properties of these three affect the universe as we know it.

Paranormal investigators should have a basic understanding of electricity because its effects are sometimes felt at paranormal events. A knowledge of magnetism is also useful to the investigator because its effects are sometimes confused with those of electricity and the workings of gravity may provide a solution to some aspects of the UFO phenomenon.

Electricity

Static and current electricity

Electricity is simply the presence of electrically charged particles. They can possess positive or negative charge depending on the type of particle. Almost all positively charged particles are called protons and reside in the nucleus of atoms (figure 1). The number of protons an atom possesses determines what type of atom it is. For example, any atom with only a single proton is a hydrogen atom and any atom with two protons is a helium atom.

The hydrogen atom is the simplest atom possible, consisting of: a single proton (which is positively charged) in the nucleus and a single electron, which orbits the nucleus at a relatively large

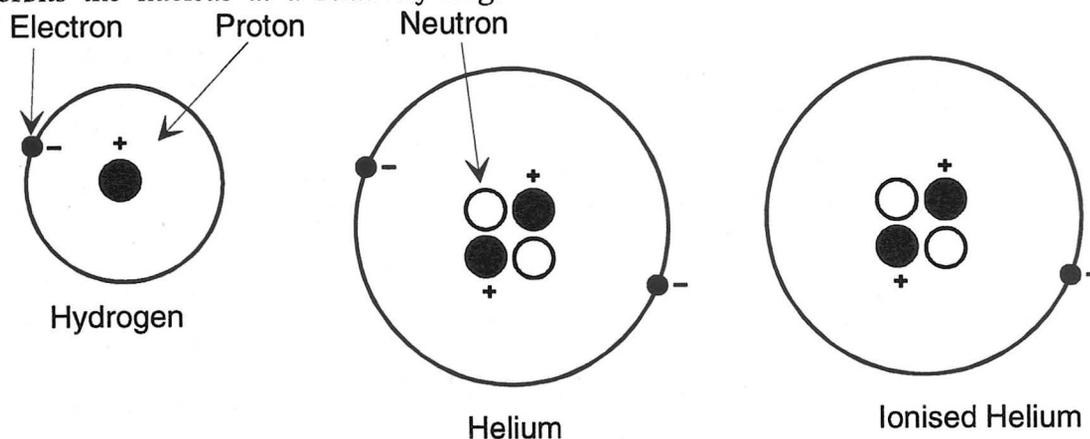


Figure 1 The structure of hydrogen and helium atoms.

distance. The electron has the same amount of negative charge as the positively charged proton, and when the two are held in the same atom there is a perfect electrical balance because the effect of the electron's charge cancels out the effect of the proton's charge.

In the helium atom, the positive electrical effect of the two protons in the nucleus are cancelled by the two orbiting negatively charged electrons. There are two further particles in the nucleus of the helium atom called neutrons but these have no electrical charge. Under certain conditions it is possible for an atom to lose an electron, leaving the atom positively charged. The atom is then said to be ionised and has become a positive ion. The behaviour of the ion can then be influenced by electric fields.

Before describing electric fields, it is important to understand what a field is, and whether it is electric, magnetic or gravitational. When something at a point in space causes an effect at a different point in space with no visible means, we say that a field is present between the two points.

Electrostatic fields

There is a universal law of physics which states that:

Like charged particles repel each other and unlike charged particles attract each other.

In other words, a positive repels a positive, a negative repels a negative, a positive attracts a negative and a negative attracts a positive.

Imagine that we had some way of taking a lot of atoms, ionising them and then separating the positive ions from the free electrons and putting them at two different points in space. We have separated our particles into positively charged ions at one point in space and negatively charged electrons at a different point.

If left in a gas or vacuum, the negatively charged particles would repel each other and fly apart, as would positively charged ions, but let us consider that they are now contained in two solid metal plates, one for the electrons and one for the positive ions.

An electric field will be generated between the ions and the electrons, which will produce an attractive force between the two plates. The size of the force is directly proportional to the number of unlike charged particles and inversely proportional to the distance between them (i.e. force gets larger as distance gets smaller). Any other charged particle which came into the electric field would migrate towards the plate which holds the opposite charge. Therefore an electron would migrate towards the positively charged ions and a positive ion would migrate towards the electrons. The path that a positively charged ion would take depends on the shape of the plates and would follow what is known as an electric field line of force (figure 2).

Once the ion reaches its destination plate it would pick up an electron from the surplus on the plate and once again become a whole atom. This would slightly reduce the overall electric field between the two plates by virtue of the reduced number of positive ions and free electrons.

The positively charged plate is said to have a higher potential than the negatively charged plate and a potential difference exists between the two plates. This potential difference is measured in volts with which we are all familiar. The higher the number of unlike charged particles on the plates the higher the voltage between them and the greater the force on any charged particle between the plates. The electrons would not normally leave the negatively charged plate to migrate to the positive one unless fairly extreme conditions apply. One example of this is where the voltage between the plates

becomes so high that the air between them becomes temporarily ionised by the potential difference of the plates. This causes a sudden rush of electrons across the now conducting air. This is in fact an electrical spark. The spark partially neutralises the charge and the potential difference between the plates. Under these conditions we say that an electric current flows between the plates and this gives rise to a different type of field known as a magnetic field which is discussed later.

In order to separate the electrons from the ions in the two plates we have to supply a degree of energy. There are various ways of doing this depending on the materials used. For example, if a glass rod is rubbed with silk, electrons transfer from the glass to the silk and when the silk is removed from the rod, the silk is left negatively charged and the glass positively charged. The opposite occurs when an ebonite rod is rubbed with fur. Electrons transfer from the fur to the ebonite rod leaving the ebonite negatively charged and the fur positively charged when they are separated. In both of the above cases, the energy for the electric field came from the energy used in overcoming the frictional force of the two materials when they were rubbed together.

An everyday example of the production of static electric fields is in the common television tube. The TV tube of a typical colour set requires about 20,000 volts (20kv) to achieve the brightness and contrast of a colour picture which we have all become accustomed to. The energy for this electric field comes initially from the 240 volt mains supply where it is supplied as an alternating voltage with the neutral pin at or about zero volts and the live pin constantly changing voltage from 340 volts positive to 340 volts negative 50 times every second (50 Hz). Electronic circuits inside the TV set then convert the voltage from 240 volts alternating to 20kv non-alternating. Alternating voltages are often termed ac voltages where the ac stands for alternating current. Non-alternating voltages are usually termed static or dc voltages where dc stands for direct current. A battery supplies a dc voltage but it is not usually called a static voltage because this term is usually reserved for higher dc voltages than you would expect to obtain from a battery.

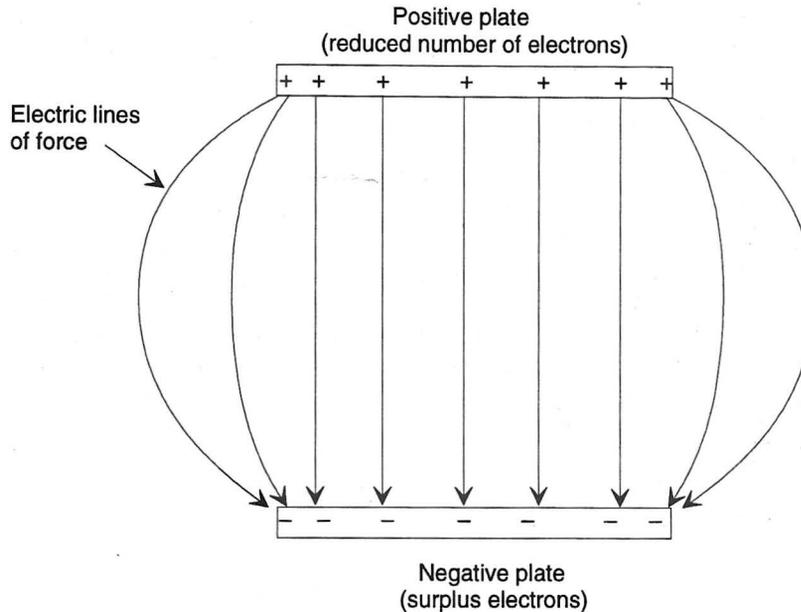


Figure 2 Electric field lines of force between a positively and negatively charged plate.

THE EFFECT OF ELECTRICITY ON THE HUMAN BODY AND ITS RELATIONSHIP WITH PARANORMAL EXPERIENCES.

The human body is basically an electrical conductor, i.e. something which generally allows electricity to conduct through it without catastrophic breakdown of insulation such as, that which occurred with the spark between the plates. However we are more conductive on the inside than on the outside. Our skin is one of the least conductive parts of our body. During the natural course of life, our bodies generate small amounts of electricity, which are then used for communication between the brain and other organs in the body. The small electrical impulses flow from the brain along nerves to tell various organs what to do and to provide feedback from our senses such as sight and hearing to the brain.

Electrocardiograph (ECG)

Various types of electrical impulse can be picked up in the body by sensitive medical instruments. The least sensitive of these is the electrocardiograph (ECG). This is able to pick up the small currents which travel from the brain to the bundle of his in the heart. The bundle of his is

a complex nerve structure which distributes the signals from the brain to the various parts of the heart to instruct them to move at the appropriate time, and hence produce the pumping action to efficiently circulate blood. The voltage which is recorded at the skin is only about one thousandth of a volt or 1 millivolt (mv for short). However, if you were to take a normal oscilloscope with a 1 mv sensitivity and try to look at the ECG of a person with the normal oscilloscope probes, you would be unlikely to see anything. This is because the normal probes would not make a good contact with the relatively insulative skin. To get around this problem, ECG electrodes are used which have a large surface area and a conductive gel which makes a good contact with the skin. The gel takes care of the roughness of the skin which would otherwise only have a small contact area with the measurement leads, figure 3. Once the ECG electrodes have been placed at strategic locations on the body, measurements can be made on the size and shape of the ECG waveform (figure 4) and a diagnosis made of many types of abnormality of the heart. The heart rate is recorded at the same time because each pulse of the heart produces a new waveform cycle and hence the number of beats per minute is simply the number of waveform cycles per minute.

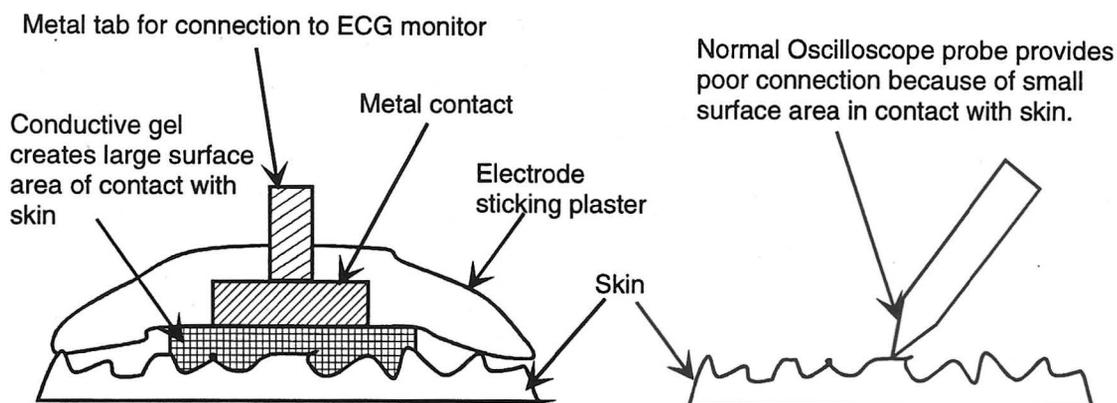


Figure 3 Good and bad connections made to the skin by an ECG electrode and an oscilloscope probe.

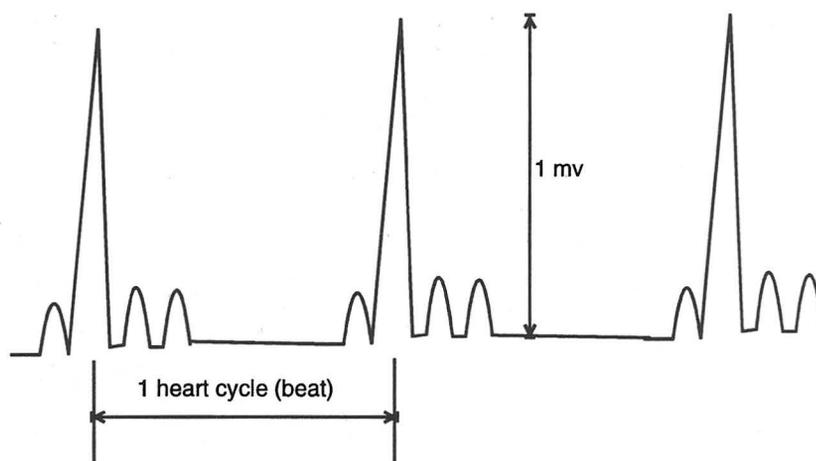


Figure 4 A typical ECG waveform.

Electromyogram (EMG)

The electrical impulses which are sent to the muscles from the brain can also be monitored by another medical instrument known as an electromyogram (EMG). This instrument is usually a little more sensitive than the ECG although similar in operation. The electrodes are attached to the skin adjacent to the muscle group of interest, then when the muscle is flexed, a recording of the signal can be made. When somebody moves they do this by using muscles and hence an EMG is implied with all movement. This can make ECG measurements difficult when the patient is moving as the EMG signal is picked up by the ECG recorder. If you are unlucky enough to require an ECG, you should co-operate with the staff who are making the recording by keeping as still as possible. Otherwise the recording may have to be made again. The electromyogram has been used to diagnose certain muscle disorders but it is more

generally used as a research instrument to probe muscle function and metabolism.

Electroencephalograph (EEG)

The origin of all these impulses is the brain, but ironically this is the most difficult organ to monitor from an electrical point of view. The instrument used to monitor electrical activity of the brain is known as an electroencephalograph or EEG for short. The EEG needs to be at least ten times as sensitive as an ECG to be able to monitor electrical activity of the brain. Again, electrodes with conductive gel are used to make contact with the skin, but this may involve shaving part of the head, as conduction will not take place through hair. The EEG waveform is probably the most difficult to interpret and a medical diagnosis is often inconclusive except in the case of brain death where there is an absence of signal.

None of these measurement techniques apply any electrical voltage from the instruments but pick up the natural voltage and currents in your body. Hence you will not feel any sensation while any recording is made other than the contact of the electrodes. This is in contrast to when the electrodes are removed which is often accompanied by a loud yelp from the victim as the electrode sticking plaster rips off a clump of hair from an arm, leg or part of the chest, (probably doesn't apply to female chests).

Application of electricity to the human body.

Sometimes it is necessary for a clinician to apply an external electrical impulse to a human body to maintain life such as in the use of a defibrillator. This is used when a patient has suffered a cardiac arrest and the heart cannot be brought back to a normal rhythm by other means. The high voltage electric shock applied to the chest causes a sudden surge of electrical current through the heart and sometimes starts the heart beating normally again. There is no direct connection to the heart and hence the current has to travel through skin, fat, ribs and muscle before getting to the heart. The surge of current through the muscle will cause the muscles to tense up and hence cause an involuntary spasm in the patient's chest movement.

Some patients suffer from a defect in the heart which requires an external electrical pulse to keep the heart beating with a normal rhythm. This is achieved with a cardiac pacemaker which is a battery

operated device attached to the patient and has a direct electrical connection to the heart via wires.

Another medical application of electricity to the body is in the use of diathermy, which is an electrosurgical tool. An aluminised plate with a large surface area is attached to the patient's back and connected to earth as shown in figure 5. The diathermy generates a radio frequency alternating voltage up to a power of a couple of hundred watts. This energy is applied to the patient via a cutting tool probe, which has a sharp point. This causes a radio frequency electrical current to flow between the cutting tool and the plate. The density of current at the cutting tool is very high whereas at the plate it has spread out over a large surface area. The high intensity current at the cutting tool causes the flesh to be cut when the current is turned on via a foot switch, but causes no damage where the current leaves the patient at the plate. One advantage of diathermy over a conventional scalpel is that it partially cauterises the wound as it cuts, thereby reducing blood loss. When the power to the diathermy is reduced, it can be used solely as a cauterisation instrument. The medical application of electricity to the human body always involves pulses of electrical current i.e. a flow of electrons. However, most paranormal experiences involve static electricity. Witnesses describe either small electrical discharges in the air (similar to the spark described earlier) or tingling sensations in their own body.

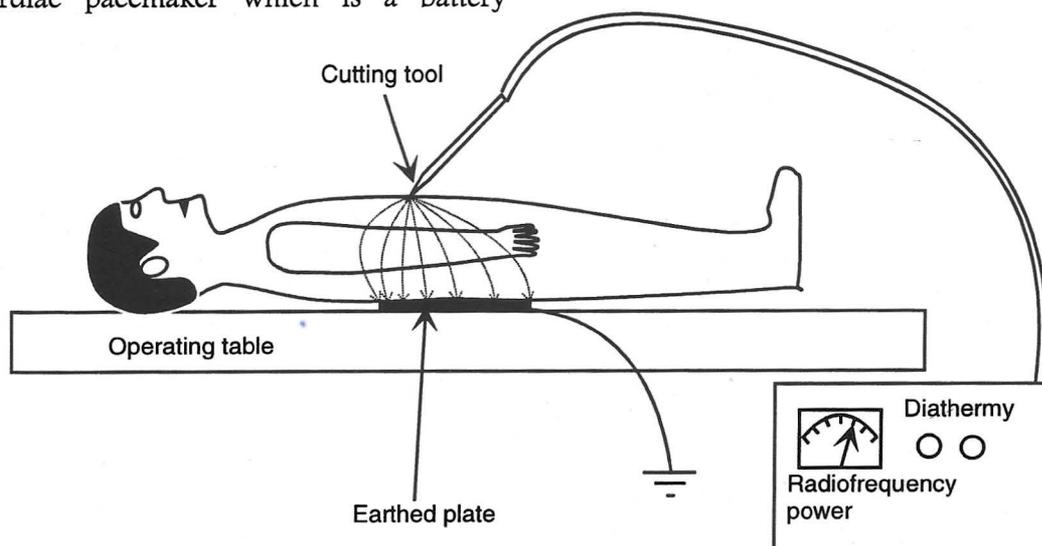


Figure 5 Radiofrequency diathermy used in electrosurgery.

A tingling sensation can be caused when a person becomes charged up with static electricity by any means. The body is at a different potential to the surrounding environment and hence all parts of the body have a slight attractive force to the environment, just as in the plates of figure 2. This force is very small and difficult to measure, but it is felt as the hairs on our head and limbs tend to point towards the environment instead of being affected only by gravity. A similar effect will be felt if the body does not become electrically charged but the surrounding environment does. If you want to determine if it is you that is electrically charged or your environment, there is a simple test that you can perform. If you earth yourself and the sensation disappears, then you know that it is you and not the environment that was charged up. You can earth yourself by touching any part of a metal gas fire or its connecting pipes or any water pipes or anything they are electrically connected to such as water taps, radiators or a metal draining board. If you are charged up, you will feel a momentary electric shock just as you touch the earthed metal. If the sensation is still present after earthing yourself then it is probably some part of the environment which is charged up. Look for anything which is close to electrical sockets which may generate a high voltage such as the television. The glass tube of the television is the part which retains most static electricity and you should check to see how the sensation varies with distance from the television.

You can test for electrostatic fields with a piece of tissue paper. Cut off a strip about 10 cm long and 2 cm wide. Hold one end and touch the other end on to the television

screen while it is switched on or just after it is switched off. You will find that the electrostatic field attracts the tissue and likewise the hairs on the back of your hand.

Magnetism

Static and alternating magnetism

We constantly live our lives in the presence of the earth's weak magnetic field. The strength of this field is about 0.6 Gauss and while human beings are unable to detect this without instrumentation it does affect lower life forms. The orientation of magneto-static bacteria and the migratory pattern of birds, are affected by the earth's static magnetic field. The Earth's magnetic field is like a giant bar magnet going through the centre of the earth with an axis which is nearly (but not exactly) parallel to the earth's rotational axis, figure 6. Note that the lines of force are not electrical lines of force as in the previous section. If an electron or ion were free to move in the presence of a magnetic field but was initially stationary, it would experience no force by the field. This is in contrast to the electric field. However if the electron or ion were moving, it would experience a force in the direction which is perpendicular (at right angles) to both the magnetic lines of force and the direction of motion of the particle. It is possible to produce much stronger magnetic fields artificially either by magnetising ferromagnetic materials such as iron or by using electromagnets such as the one in figure 7. This is simply a coil of electrical wire wound onto a cylindrical former with an electrical current flowing through it.

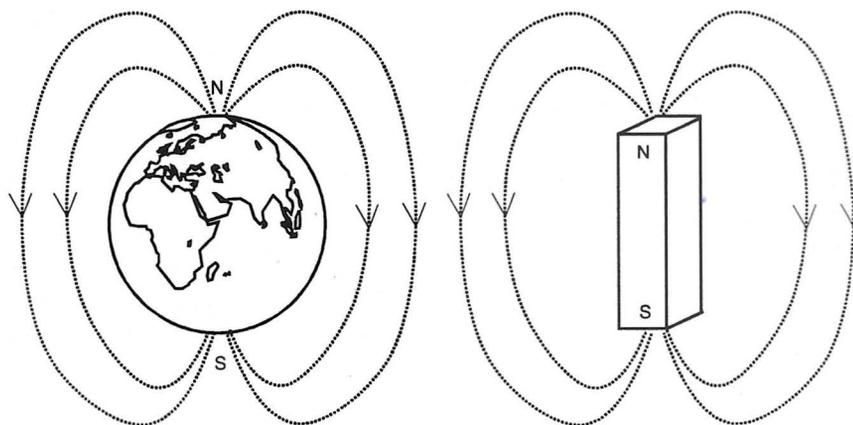


Figure 6 The earth's magnetic field and the bar magnet analogy.

The magnetic field produced is similar to that of the bar magnet with a North pole at one end of the cylinder and a South pole at the other. This is produced with a direct current (dc) but if an alternating current were used, the polarity of the field would alternate synchronously with the direction of current.

The common units used for measuring magnetic field are the Gauss and the Tesla,

(10,000 Gauss = 1 Tesla). It would be inappropriate to measure the earth's magnetic field (0.6 Gauss) in Tesla, and likewise it would be inappropriate to measure some of the strongest artificial magnetic fields in Gauss as some types of instrument use static magnetic fields produced by electromagnets of around 10 Tesla.

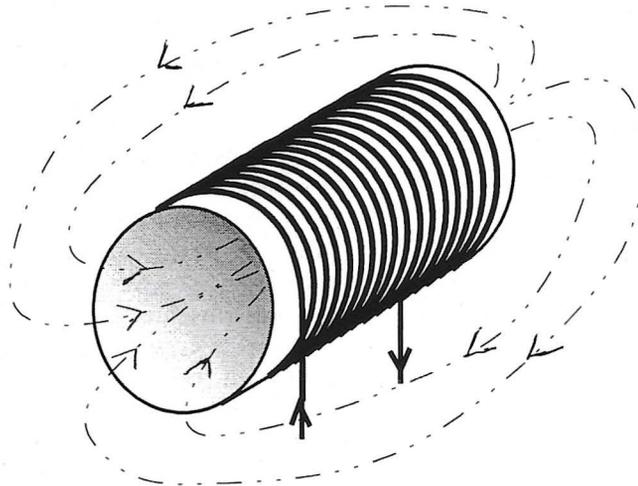


Figure 7 Magnetic field produced by a cylindrical electromagnet

The effect of magnetic fields on the human body

Since it is known that humans cannot detect magnetic fields as low as that of the earth's, we should examine the effects of much stronger magnetic fields on the human body. In recent years, a new diagnostic medical imaging technique has evolved which is now called magnetic resonance imaging (MRI). It developed from a much older spectroscopic technique used for determining the chemical structure of unknown compounds. This was called nuclear magnetic resonance (NMR). It was decided to drop the word nuclear from the medical imaging application because many people associate it with ionising nuclear radiation such as gamma rays, and MRI and NMR do not use ionising radiation. They do however use very strong magnetic fields, both static and alternating at radio frequencies (RF). I have personally spent more than a thousand hours inside a MRI magnet at a field strength of 1.5 Tesla (about 30,000 times the strength of the earth's field) and never once felt any sensation from the static field or the other RF fields which are

generated during scanning. I should point out that much of my time spent in the magnet has been to have my brain scanned with up to 2 kw of pulsed RF power and my only outward sign of insanity has been my joining of a paranormal research group. To put 1.5 Tesla in perspective, this magnetic field would wipe all data from the magnetic strips on your credit cards or floppy disks at a distance of 2 meters. Also, if a ferromagnetic object such as a large steel screwdriver were brought close to the magnet it would be snatched out of your hand by the field and become a potentially lethal missile to any one inside the scanner. If this strength of magnetic field does not produce any discernible sensation in me and my colleagues, it is unlikely that magnetic fields produce any effect on witnesses or investigators at paranormal events. If you do suspect strong magnetic fields they should first of all be investigated with a standard navigational compass. Notes should be made of anything which does not work after the event such as credit cards, floppy disks, mobile phones, radio pagers and analogue watches as these can

all be affected permanently by magnetic fields. It is not possible for static magnetic fields to produce tingling sensations in normal subjects as electric fields do.

I do not want to mislead you into thinking that strong magnetic fields do not have any effect on our body because it is known that they do. It is just that we cannot sense it with our five normal senses. For the sake of completeness I will describe the known effects of strong magnetic fields on the human body.

1) Static fields of 4 Tesla and above are known to reduce blood flow in major vessels because blood is a conductor which is moving, and hence an electric current is induced in it by electromagnetic induction. This current gives rise to its own magnetic field and by Lense's law the direction of this field opposes the magnetic field which gave rise to the induction in the first place. Therefore, the south pole of your blood faces the south pole of the magnet and hence produces an opposing force to the blood flow. The size of the force depends on the strength of the magnetic field, the speed of the blood flow and the diameter of the blood vessel. The only place in the human body where this effect is known to be significant is in the aorta, which is the main artery carrying blood from the heart.

2) Above 4 Tesla, experiments with primates have suggested increased cardiac arrhythmia (erratic heart rhythm) and reduced mental function. Some humans have also reported vertigo and nausea which is probably due to induced currents in the brain when the head is moved.

3) MRI scanners also use what are known as gradient fields. These are magnetic fields which switch on and off very rapidly as part of the imaging sequence. In scanners with the most powerful gradient fields, it is possible to cause peripheral nerve stimulation which results in muscle twitching.

4) RF magnetic fields cause the tissue to heat up just as in a microwave oven, but this is normally taken care of by the body's thermoregulatory system. However, there are parts of the body which cannot be regulated because of a lack of blood flow such as the fluid inside the eyes and the testes.

It is very unlikely that any of the above effects would be experienced at a paranormal event as the strength of fields required to produce the effects are enormous.

Gravity

In my opinion, gravity is the least understood of all the known fields and potentially the most useful when we learn to understand it. Electric fields and magnetic fields are easy to produce artificially, but gravity can at present only be controlled by increasing or decreasing the amount of matter producing the field, or varying the distance between objects producing the field. So, if you wanted to double the size of the earth's gravitational field, you would have to double the amount of matter in the earth and squash it into the same space. Not an easy job for your average physicist. If you wanted to make the earth's gravitational field equal to zero, (a useful proposition for the launch of space vehicles), you would have to make the earth's mass equal to zero. This is equally difficult for the physicist.

The Newtonian laws of gravity

In about 1666 Sir Isaac Newton, who was a keen astronomer, formulated his law of gravitation and proved it by applying it to the motion of the moon around the earth and predicting its orbital period. The application of the laws allowed him to find the gravitational constant known as G in equation 1. His law stated that the gravitational force between two bodies is directly proportional to the product of their masses and inversely proportional to the square of the distances between them (equation 1 and figure7). In this equation, M1 is the mass of one object measured in kg, M2 is the mass of the second object measured in kg, d is the distance between the centres of the objects measured in Metres, G is a constant and force is measured in Newtons.

This law, when applied to the predictions made by Kepler and others about the motion of planets in orbit, appeared to work perfectly. The reason why the planets remain in orbit is that their momentum, which tries to make them fly off in a straight line, is exactly counterbalanced by gravitational force which attracted them towards the sun.

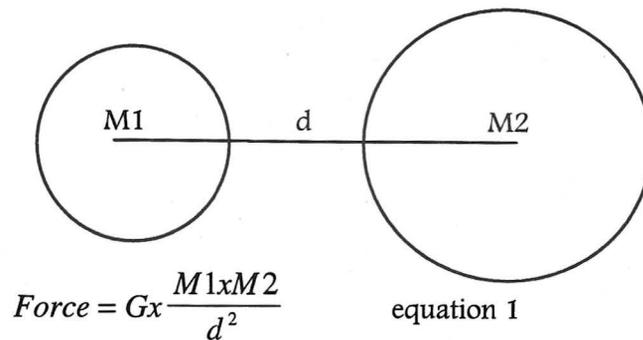


Figure 7 Newtons law of gravitation.

Einstein's theory of gravitation

In 1905, Albert Einstein formulated his special theory of relativity. He followed this in 1915 with his general theory of relativity. Both of these are well beyond the scope of this article and the author, in anything other than a brief outline, but a basic understanding is required if you want to understand the possibility and the difficulties of faster than light speed (superluminal) travel. In his special theory, Einstein stated the following main facts.

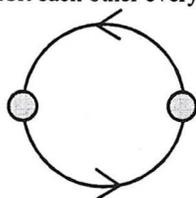
1. Time is not constant for all observers in the universe but runs more slowly the faster the observer is travelling.
2. Nothing in nature can move faster than the speed of light which is 300 000 000 meters per second.
3. Velocities do not add up as in Newtonian mechanics. Hence, if a spaceship travelling at half the speed of light suddenly switched on a light source at the front of the spaceship, the light would still only travel forwards at the speed of light, not one and a half times the speed of light.
4. Time is an integral part of our dimensions and should be included alongside our three spatial dimensions (you can think of these as length, width and breadth) to form the concept of spacetime.
5. Mass is a form of energy and hence the most famous equation in the world $E = mc^2$ where E is the energy measured in joules, m the mass measured in kg and c the speed of light measured in meters per second. c actually equals 300,000,000 meters per second and

hence c^2 equals 90,000,000,000,000,000. This is why nuclear weapons release such a huge amount of energy despite only losing a tiny fraction of their overall mass after the nuclear explosion.

6. A moving object gains mass as its speed increases and approaches infinity as the speed of light is neared.

For those of you who believe that we are visited by alien races from outside our own solar system, some of the above facts present serious difficulties for that hypothesis due to the huge distances that would have to be travelled. Before I give an example of how far they would have to travel, and how long it would take, I will clear up any confusion about which is the nearest star to our own solar system. Depending on who you ask, you may get the answer alpha centauri or proxima centauri. Alpha is the first letter of the Greek alphabet and alpha centauri is the designation of the brightest star visible from earth in the constellation of Centaurus the centaur. But this rather complicated star consists of three separate bodies. The two brightest bodies form a binary star system which orbit each other about once every eighty years and each has similar properties to our own sun. The third body is a much dimmer red dwarf star, which orbits the other two at a much greater distance and takes approximately one million years to orbit its two brighter companions. This third body is designated proxima centauri and is at present about 0.1 light years closer to us than the other two. Hence it is correct to answer the question either way and say that alpha centauri and proxima centauri are the nearest stars to our system because proxima is essentially part of the alpha system (figure 8).

Alpha Centauri binary star system.
Stars orbit each other every 80 years



NOT TO SCALE

Proxima Centauri
orbits the binary
system every
million years

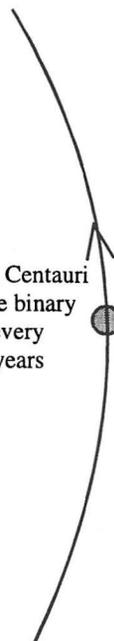


Figure 8 The Alpha Centauri triple star system.

The distance of Alpha Centauri to earth is approximately 4.3 light years and anything travelling at the speed of light would take 4.3 years to travel the distance between alpha and earth. 4.3 years is a long time to travel in a spacecraft and would present serious problems for any human attempting such a feat. However, if we put aside the problems of food, water, oxygen and energy for the time being, it might be possible for an alien race to travel this distance. The next problem the alien race encounters is accelerating the spacecraft to the speed of light and decelerating when they get to earth. This problem is bigger than it at first seems because of point 6 on the previous page. As the spacecraft accelerates towards the speed of light its mass increases thereby using up more and more fuel as the speed of light approaches. It's rather like pedalling a bicycle but as you approach 10 m.p.h. the weight of the bicycle increases to that of an ocean liner. You would never be able to reach 10 m.p.h. Likewise, the rules of special relativity suggest that the spacecraft will never reach the speed of light. This leads us to the conclusion that anything travelling from the Alpha Centauri system would take considerably longer than 4.3 years. It is worth mentioning at this point that the chance of life existing in the Alpha Centauri system is very remote anyway. This is because the motion of planets (if there are any) in such a complicated triple system would be very chaotic, unlike the circular and elliptical paths of planets in a

single star system such as ours. The chaotic motion would vary the distance between the planets and the stars considerably, leading to huge swings in temperature and radiation which are hostile to the evolution of life.

The fourth point on the previous page gives rise to the concept of space-time and may be drawn on a 3D diagram by omitting one of the spatial dimensions. If all three spatial dimensions are required in a diagram, the only way space-time can be viewed is by using several diagrams all with the same spatial dimensions but with events happening at different times as in figure 9. If we omit one of the dimensions such as length and replace this with time, then it is possible to present the three different time events on a single diagram as in figure 10. One imperfection of figure 10 is that the front of the car is more in the future than the back of the car. This demonstrates that space-time diagrams work better for small particles than for large objects. One way around this is to just consider a single atom inside the car as this only occupies a small distance in the time direction and so can be accurately plotted in the time scale.

The usual way of visualising space-time diagrams is to think of a two-dimensional board with one dimension representing one of the three spatial dimensions and the other dimension of the board representing the time dimension.

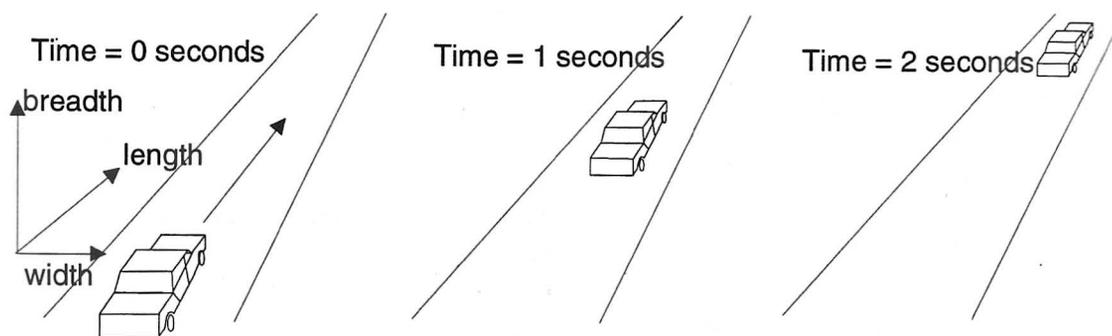


Figure 9 A car travelling in the direction of length shown at three different times with three diagrams.

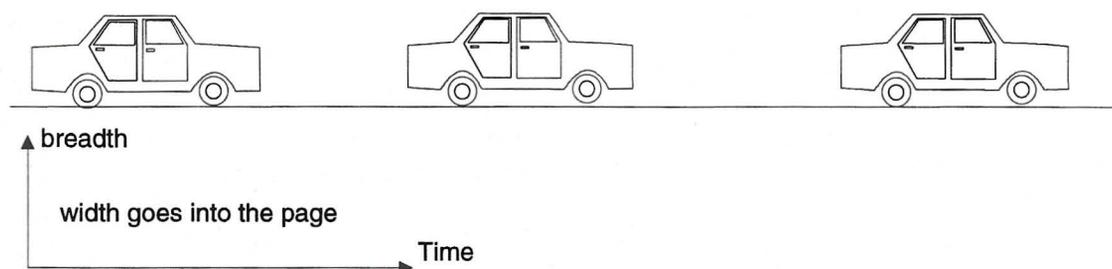


Figure 10 Three different events in time shown on a single diagram by omitting the length dimension.

In the first space-time diagram of figure 11, it can be seen that the time frames and space frames are uniformly distributed as you might expect. If a light source suddenly switched on in the middle of this diagram, the wave front of the light would travel out in all directions in space but only forward in time (from left to right in the space-time diagram). This would create an ever-increasing semicircle on the space-time diagram. Einstein's theory of gravitation is described in his later general theory of relativity. He proposed that any body with a large mass would distort the space-time fabric of the universe as if it were made of a thin sheet of rubber and a large weight placed upon it (second part of figure 11). The degree of distortion of space-time is proportional to the mass creating the distortion and causes both distance and time to be warped. The effect of a large mass on time is similar to that of a moving observer, i.e. time slows down near massive objects. The theory of general relativity has been proved to a high degree of accuracy in recent experiments but was first proved to a reasonable accuracy during an eclipse of the sun in 1919. It

was known that the gravitational field of the sun would bend light rays and hence it should be possible to see stars just over the horizon of the sun during an eclipse. However, Einstein's prediction of the degree of light bending was exactly twice that predicted by Newtonian mechanics and measurements made during the eclipse showed that Einstein's theory was the correct one. The reason that Newton's theories worked so well despite being wrong was that most objects we observe, including astronomical bodies, only move at a tiny fraction of the speed of light or produce a very small distortion on space time. Hence relativistic considerations are small and were lost in observational or experimental error.

Ultimate gravity, the black hole

There are some astronomical bodies which produce huge gravitational fields and huge distortions of space-time, namely black holes. These are thought to be produced when a large star has expended most of its energy in nuclear fusion and the density of the star starts to increase as its pressure reduces.

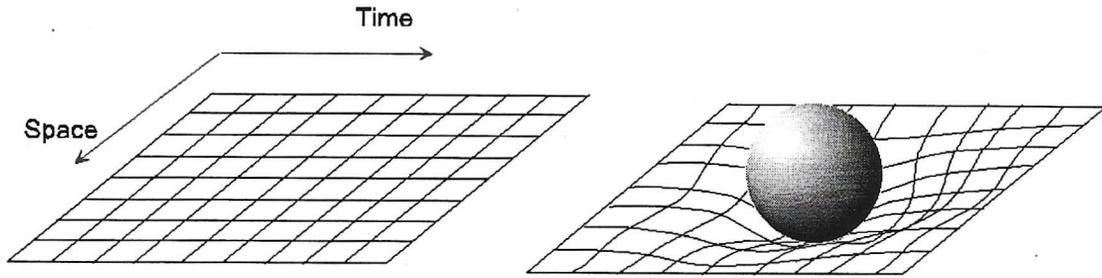


Figure 11 Spacetime diagrams without and with a large mass in them.

The star collapses in on itself to such an extent that the space between electrons and the nucleus of the atoms is reduced. The electrons and protons in the nucleus of the atoms combine to produce neutrons and after a time the whole star may consist entirely of neutrons to leave what is known as a neutron star. The density of matter in such a star is completely outside our normal experience and a matchbox-sized piece of neutron star would weigh several tons on earth. If the star is relatively massive (about three times the mass of the sun), it will collapse even further under its own gravity to produce a black hole. The gravitational field produced by the black hole is so great that even light cannot escape and theory suggests that it should therefore look black making it difficult to observe directly. The black hole itself does not consist entirely of matter because the gravitational field, which stops light escaping, extends beyond the matter itself. The highly condensed matter inside a black hole is known as a singularity and the region of space from which light cannot escape is bordered by a sphere known as the event horizon.

Cygnus X-1

Almost all astronomers are now convinced of the existence of black holes but most black holes are difficult to observe optically because they are black. However, the effects of their strong gravitational fields can be observed on other stars which are close to them. It is thought that about half of the stars in our galaxy are binary like the binary pair of Alpha Centauri, figure 8. The orbital periods of these binary stars are quite variable and we can tell that they are orbiting each other by the Doppler shift of their optical spectra. In other words, the colour of light from the star that is approaching us shifts towards the blue end of the spectrum (higher frequency) and the colour of light of the star which is moving away from us is shifted towards the red (lower frequency).

This is analogous to the siren on an emergency vehicle which increases in pitch as it approaches you and then shifts to a lower pitch as it passes you. Theory predicts that any electrically charged material entering a black hole or a neutron star will emit X-rays as it approaches the event horizon. A survey of the sky performed by a satellite has identified many X-ray sources. Some of these sources appear to have a close companion normal star so that a binary pair is formed between the black hole or neutron star and the normal star. Astronomers can deduce which sources are likely to be neutron stars and which are black holes from a knowledge of the orbital period of the binary system and the mass of the normal star. One of the most likely candidates for a black hole is Cygnus X-1. This is an X-ray source in the constellation of Cygnus which appears to be in a binary system with a bright blue companion star. Their orbital period is about 5 and a half days and this gives an indication of the mass of the black hole to be six solar masses thereby ruling out the possibility of it being a neutron star. The matter falling into the black hole, which produces the X-rays, is thought to come from the companion star and is ripped off by the intense gravitational field of the black hole. It is now believed that black holes may be at the centre of many galaxies including our own Milky Way.

Superluminal travel

The laws of special and general relativity do not allow anything to travel faster than the speed of light and hence the chance of an alien race visiting earth is very low unless either the alien race lives much longer than humans or relativity is wrong. Before you rush to burn me at the stake for suggesting that the greatest mind in physics this century might be wrong, please remember the genius of Isaac Newton who was shown to be wrong 250 years after formulating his theories of motion and gravitation. In addition, just over

fifty years ago, much of the scientific community thought supersonic flight would be impossible. Ha!

Suppose we abandon the idea of using conventional rocket engines for space travel and look at the possibility of artificially warping space-time. This is the principle of the warp drive in the science fiction series Star Trek. Let us consider first subluminal travel with a warp engine. We require a system which will transport living and non living material from one point in space to another distant point quickly, without the usual G-Forces that you would expect during normal acceleration and deceleration. If proper Newtonian acceleration forces were applied to the Enterprise during a routine acceleration to warp 1, (the speed of light) the crew would be turned into a 1 mm thick layer of blood and snot on the aft wall of the command saucer by the G-forces. One way around this was suggested by Stan Conway at a talk he gave at the BUFORA conference in Liverpool in April 1997. He suggested that an alien spacecraft might artificially generate a miniature black hole at a point in space close to it in the direction that it wants to go. The gravitational field of the black hole severely warps space-time and pulls the spacecraft and its occupants rapidly towards it. One advantage of this idea is that the occupants do not feel the G-forces relative to the craft just as a person who is in a lift which is free falling to the ground does not feel their own weight on the lift floor. A disadvantage is that the black hole acts on everything within range of its gravitational field, not just the spacecraft. At present we have no knowledge of how to make gravitational fields either directional or selective about what they act upon.

Even if it were possible to locally warp space time as described in the above example, it still does not get around the rule that the speed of light is the theoretical maximum attainable and hence superluminal travel is impossible. In Star Trek they get around the problem by having warp field generators which will propel the ship at almost the speed of light and then nesting many of these generators together in the engine nacelles to achieve a field which propels the ship beyond the speed of light. The huge amount of

energy required to generate the warp field, which propels the ship, is provided by the combination and destruction of matter and anti-matter. Antimatter is similar to normal matter except that the electrical charges are opposite so electrons have a positive charge and are called positrons. When an electron and a positron come into contact they instantly annihilate each other and release energy in accordance with Einstein's mass energy relation ($E = mc^2$). The famous Deuterium-Lithium crystals are used to help contain the antimatter as it is supposed to be the only known matter which does not react with anti-matter. There are obviously a few problems with the Star Trek theory, but it is only science fiction and is likely to remain the only way we can 'boldly go' to other star systems in the foreseeable future.

If we were able to generate gravitational fields which were great enough to enable superluminal travel we would still be unlikely to control the area of effect of the field and one possible extreme consequence of this is shown in figure 12.

Before leaving the subject of gravitational fields and space-time warping it should be said that although I have presented the article as if there is no means of controlling gravity, there are some very early publications from the USA that suggest that this is not the case. Thomas Townsend Brown is reported to have made flying discs up to 3 feet in diameter, which by the application of an electric field could reduce their weight and cause them to fly. He had trouble getting recognition from the scientific community until he finally demonstrated his invention to the US Navy in 1953 who promptly classified the technology as secret and little more has been heard of it since. If these reports are true, then Brown demonstrated a definite link between gravity and electricity, which is something that Einstein spent many years trying to prove. The proof of this theory is now considered to be the quest for the Holy Grail of physics, and is known as the unified field theory. There is practically a guarantee of a Nobel Prize for anyone who can prove it, so if you have any ideas about it, get your papers into Nature now.

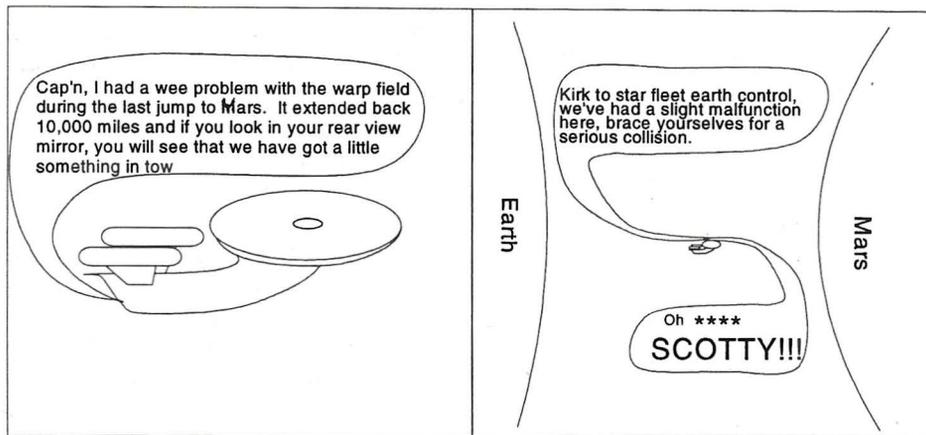


Figure 12 Possible consequences of dabbling in warp field physics.

Evidence for spacetime distortion at paranormal events.

Is there any evidence to suggest that space-time is distorted at paranormal events? There may well be assuming that witnesses are telling the truth. For example, Jenny Randles has interviewed two American airforce personnel (Penniston and Burroughs) about a UFO sighting in Suffolk in 1980. Both claim that the space near the sighting was as if they were moving through treacle and that time did not feel like it had its usual meaning. Other witnesses to UFO sightings have claimed that time appeared to be moving in slow motion. However, similar reports are also heard from witnesses to tragic events such as violent crime and serious accidents. Hence the effect may be psychological rather than physical, although local time or space-time disruptions should not be ruled out just because our present science can not explain them. Witnesses to UFO sightings and especially abduction cases often report "missing time" i.e. that the time that had passed in reality was much longer than they had estimated. Is this another type of space-time distortion?

Conclusion

I have covered a great deal of ground in this article about a wide range of topics and tried to condense the contents of several text books into a matter of about fourteen pages while trying to keep everything in the context of paranormal investigation. Obviously, I have had to skimp on much of the detail of field theory, but I hope that I have convinced you that knowledge of physics is important for paranormal investigators if the true nature of the universe is to be understood. We

should always keep an open mind about new theories. If you are in any doubt about this, just remember that it was not that long ago that the theory of the earth going around the sun was shunned and probably considered paranormal because the earth was obviously the centre of the universe.

I know that some paranormal investigators dislike physics and I could never persuade them to read a physics textbook, but there is a more interesting way to learn about physics. The BBC's learning zone programmes run on BBC2 in the early hours of the morning and are meant to be recorded for review at a more convenient time. Some of these programmes cover physics, astronomy and psychology subject matter and are far easier to understand than textbooks because of the demonstrations and graphics that TV lends itself too. If you would like a free timetable of when the various learning zone programmes are on, either write to the BBC at:

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Room G420
BBC White City
201 Wood Lane
London
W12 7TS

or telephone 0181 746 1111 during normal office hours (answerphone operates outside office hours)

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Beware~Hoaxers at Work

By Colin Veacock

That old, misunderstood dictator, Hitler had it right when he said "The bigger the lie, the more people will believe it!" Unfortunately, he forgot to add that the more surreal, ridiculous and moronic a statement is, not only will people be more prone to believe it, but they will also love you for it when the truth is revealed. The plain fact is that given the right circumstances, people will believe absolutely anything.

The War Of The Worlds, Alternative 3, The Ghostwatch Hoax, Doug Bower and Dave Chorley-pensioners on acid, who reputedly created the early crop circles; the James Maybrick yarn, the Hitler diaries, the conservative party's manifesto and Tony Blair's welfare reforms all prove that without doubt, we homo-sapiens are a gullible lot. What some don't realise is that some liars, hoaxers and practical jokers, or shall we say people who are conservative with the truth, have gone down in history because they made the ridiculous and sublime seem like reality, unlike Jeremy Beadle, who makes reality seem ridiculous and makes me and most of the TV viewing public, sick in the process!

Take Francis Griffiths and her cousin, Elsie Wright. They couldn't have imagined that their photographic practical joke would be so well believed by nearly everyone, including the eminent Sir Arthur Conan Doyle. Between 1917 and 1920, Elsie and Francis produced five photographs, taken on the banks of a small stream in Cottingley, Yorkshire, which created such a stir, that the 1920 edition of "The Strand" magazine had the headlines- 'Fairies Photographed-An Epic Making Event'. Included in the magazine were several of the pictures taken with Elsie's father's camera, which showed fairies and elves in playful mood cavorting with the two girls. At the time, the notion that the camera never lies was accepted as fact and no one questioned the girls' honesty, especially after Conan Doyle announced himself duly

satisfied. Even Arthur and Polly Wright, Elsie's parents, accepted that the girls had been in contact with fairies.

And that's the way it remained until 1980 with the publication of "James, the amazing Randi," or as some have labelled the escapologist and magician, "James the amusing Randi's" book, "Flim-Flam". Randi had computer enhanced the Cottingley fairy photographs and proved that they weren't three-dimensional. He also showed that the pictures were too sharp and clear to have been taken as the two girls said they had, as the small waterfall behind the fairies was a blur while the wings of the fairies were crisp and clear. Something that would be impossible if the wings were flapping and constantly moving! Finally, Geoffrey Crowley, editor of The British Journal of Photography, and Joe Cooper, a paranormal investigator, turned their attention to the mystery and revealed the truth. Francis admitted to Cooper that the photographic fairies were in fact cardboard cut outs of drawings taken from a book entitled, "Princess Mary's Craft Book". The girls had taped long hat pins to the rear of the cardboard fairies and pushed them deeply into the ground to give the impression that the elemental beings were free standing. They would never have let the hoax get out of control if Arthur Conan Doyle had not become involved. The thought of discrediting and humiliating such a widely respected figure was unthinkable.

We have all told little white lies in the past to get ourselves out of a sticky situation and I don't suppose for a minute that any of us have lost any sleep over them. However, there are some, like myself, who cannot lie to save our lives. When I was a wee nipper, about eighteen or so, I had the misfortune of being stopped by the police while leaving the Mersey Tunnel at Three in the morning after having sped through at over eighty miles per hour. The next day I had to explain to my father what had happened

and after several hours, I convinced him that the police had exaggerated my speed, only for my friend, who was with me at the time of being stopped, to knock at the door while I was indisposed. Of course the first question my father asked was, how fast had I been travelling, only for my so-called snitch of a friend to tell him "Oh, he was doing well over eighty miles an hour!" As you can imagine, I had some explaining to do.... Therefore, you can understand why I admire those who have conquered the ancient art of telling "porkies", especially people like Dr. James Barry.

Dr. James Barry was a retired army surgeon who had spent his illustrious career travelling between the West Indies, South Africa and India. During his younger days, Barry was a dashing young man who was admired by all the young ladies and his heroic escapades and duels became legendary and much talked about. In fact he fought many duels and consequently killed many people. Then, in London on the 25th July 1865, aged 73, James Barry fell ill and died. It was only then that the mortuary attendants discovered that the gallant and brave Dr. James Barry was, incredibly, a woman...

Makes you wonder about Margaret Thatcher, doesn't it?

During the Second World War, Reginald Jones, Professor of natural philosophy at Aberdeen University, told a lie, the results of which are startling. The German bombers that had wreaked such devastation and havoc on English cities during the May blitz, used directional beams, housed on the continent, which they followed to their targets before dropping their payload and heading back across the Channel to safety. After seeing the carnage caused by the bombing, Reginald Jones accidentally on purpose leaked classified information to the nazis which said that using the same technique, the British had invented the ingenious H₂S, a device that employed infra-red beams to locate and destroy U-boats. Consequently, Hitler ordered every German U-boat to return to the fatherland to be repainted with a special paint that

would make H₂S redundant, without realising that the device never truly existed!

Of course some practical jokers are malicious and are more to be afraid of than admired. For some, the gift of the gab can make some intelligent, sober, honest individuals, part with their hard earned cash for the most ridiculous of reasons. We've all heard the story concerning the sale of Big Ben (the clock not the male stripper!), for £1000, and Buckingham Palace for a £2000 down payment, and wondered if there is any truth in these tales. Not only are they true, but far wilder and incredulous stories have come to the surface which brings into doubt some people's intelligence.

Count Victor Lustig, for instance, sold the Eiffel Tower for scrap, while Scotsman, Arthur Ferguson sold Nelson's Column to an American tourist for £6000, saying that he would throw in the carved lions as a good-will gesture. Not satisfied with that, he then travelled to the USA in 1925, where he leased the White House to a cattle rancher for \$100,000 and later sold the Statue of Liberty to an Australian. 'New York harbour was to be widened', he told the hapless Aussie, 'and the statue had to go', and so the poor unfortunate man handed over his money and left, happy with his purchase.

"I wonder if he had it gift wrapped?"

However, nothing can compare with a practical joke which has gone down in the annals of history as the best scam ever thought up and successfully carried off. It is, quite simply, the king of all practical jokes. I am speaking, of course, of the Abyssinnian Princes scam...

In 1910, battleships and cruisers filled Weymouth Bay, Dorset. Amidst the spectacular British fleet, the finest of its day, stood HMS Dreadnought, decked out with flags and multi-coloured bunting in preparation for its special visitors. A group of Abyssinnian princes, accompanied by a high ranking foreign office official and a German interpreter, were due to take a guided tour of the pride of the British Navy.

Unbeknown to those organising the visit, there weren't any Abyssinnian princes. The whole visit was a scam dreamt up by William Horace De Vere Cole. Together with his friends, Anthony Buxton, a university cricketer, Duncan Grant, an artist, judge's son Guy Ridley, novelist Virginia Woolf and her brother Adrian, they dressed up in the most over the top, unbelievably exaggerated costumes they could find. The intention it seems was to just see how much they could get away with!

Sarah Bernhardt's make up man, Willy Clarkson, was employed to create the princes while Adrian played the part of the German interpreter and Cole the part of the Foreign Office official, Herbert Cholmondoley. It appears that nobody thought the scam would last more than a couple of minutes as the navy officials and the crew of the Dreadnought were bound to rumble the heavily made up princes who, Cole went on record as saying, "wouldn't fool anybody", but fool them they did!

All went well until the princes were boarding the Dreadnought when the first embarrassing event occurred. As they all walked onto the deck, the national anthem of Zanzibar was played and the country's standard was raised, but nobody realised, least of all, the princes who wouldn't have recognised the Abyssinnian anthem or flag anyway. They were far too busy trying to keep their faces straight. In fact, the jokers realised right from the start, that the language would be a problem and decided not even to attempt to try and disguise their lack of coherence. Whenever they were asked a question, or someone tried to indulge them in conversation, the princes would dramatically throw their hands in the air and revolve on the spot crying "bunga-bunga", at the top of their voices. During their guided tour, after spending over ten minutes talking to the Dreadnought's first mate who knew Virginia Woolf well but didn't recognise her beneath the heavy make-up, the troupe

entered a specially decked out room for a spot of lunch. This they politely refused as Clarkson (the make-up man) had told them that the make-up would be ruined if they ate or drank anything, so Cole told the officials that Abyssinnians only ate two meals a day and they had already eaten their quota. Amazingly, no one questioned this!

After this painfully obvious deception, Cole really began to push his luck much to the amusement of his friends. When they left the Dreadnought and boarded their specially laid-on train, the buffet car attendants were told that the princes would only accept food and drink from people who were wearing kid's grey gloves. No sooner had he said this than the first meal arrived, the attendant proudly wearing grey gloves that were agonisingly stretched over his hands causing him to drop the tray when he was leaving the carriage.

The most alarming event and the one which should have given the game away, at least to those who were paying attention, occurred as one of the princes, (Virginia Woolf) leant out of the railway carriage window. She waved at the crowds who had turned out in their hundreds to wish the Abyssinnian princes a fond farewell. As she waved, she sneezed and blew her false moustache off which fluttered through the air like a butterfly before falling at the feet of the station master who promptly stamped on it, probably because he thought it was a flying insect. He then kicked it off the platform and onto the tracks without realising what it was.

So, as you may now have realised, I am something of a practical joke fan myself, and what's more, it seems everyone knows it. When those nice policemen pull me over in my car, affectionately known as the Arkinsaw chuckaboom, and give it the once over, the last words they say to me is; "You must be joking"!

Funny that..... most of the girls that I ask out usually say the same thing!

Cassini Voyage to Saturn: The Search for the Building Blocks of Extra-Terrestrial Life

By Sue McAllister

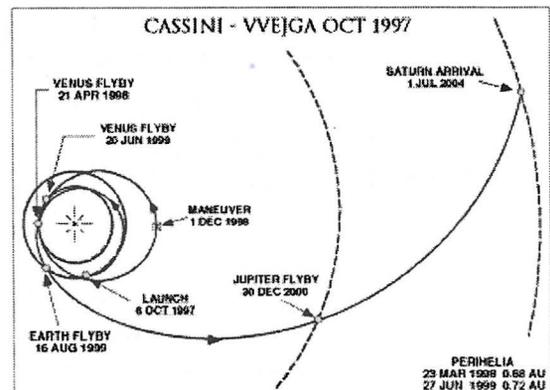
On Wednesday 15th October 1997 the Cassini space probe was launched on its seven-year journey to reach Saturn, the second largest planet in our solar system. Saturn is the solar system's most beautiful planet and has 18 known moons. Titan, the largest moon in orbit around Saturn is larger than the planets Mercury and Pluto. It has long aroused curiosity because its atmosphere contains nitrogen, carbon, hydrogen and oxygen. These elements are the building blocks for amino acids necessary for the formation of life. Scientists believe that Titan's environment may be similar to that of the Earth's before life began putting oxygen into the atmosphere. The density of Titan's atmosphere is about 60% more than the Earth's and more dense than that of the planets Mercury, Mars and Pluto. Data from the Cassini mission may help in proving that life throughout our galaxy is widespread, even though there is practically no chance of finding life on Titan or Saturn.



Saturn; our solar systems most beautiful planet.

Cassini is the largest planetary explorer of them all weighing in at about 6 tons. Others being Mariner, Viking, Voyager, Pioneer, Ulysses, Magellan and Gallileo. Cassini is named after Jean-Dominique Cassini, a French-Italian astronomer who studied Saturn in the 17th Century and discovered 4 of its 18 moons.

During its cruise to Saturn, Cassini will make four planetary flybys (see diagram below). It will flyby Venus twice in April 98 and June 99, Earth in August 99 and Jupiter in December 2000. The reason for this rather long and winding route is that the Titan IV booster rocket is only powerful enough to launch Cassini away from Earth at a speed of 2.5 miles per second. However, in order for a spacecraft to go directly to Saturn, it must be launched into space at a speed of about 6 miles per second. Cassini is therefore launched inwards towards the sun and Venus where it picks up additional speed from Venus by what is known as "gravity assist". This means that there is an exchange of energy between the planet and the probe such that the probe ends up moving quicker and the planet very slightly slower. But in practical terms the planet does not slow down at all because the planet has such a large momentum compared to Cassini. For example, when the voyager spacecraft flew by Jupiter, it gained 10 miles per second and slowed Jupiter by one foot every trillion years. The flight path is given the acronym VVEJGA which stands for Venus, Venus, Earth, Jupiter Gravity Assist.



The route that Cassini will take to Saturn.

Carrying the largest amount of plutonium ever sent into space, about 32kg, it was launched by a Titan IV rocket which has a one in twenty failure rate! This radioactive plutonium being the focus of worries caused protests outside the Whitehouse in Washington D.C. NASA responded by saying that a person is more likely to be hit by an asteroid than suffer exposure of harmful radiation from Cassini and the chances of plutonium being released during the flyby in August 99 are fewer than one in a million (supposedly)! Solar power is not an option for Cassini as Saturn lies ten times as far from the sun as the earth.

Arriving at Saturn in the summer of 2004, Cassini will study Saturn, its famous rings and its 18 moons. The centrepiece of Cassini is the European built Huygens probe which will be released towards the cloud covered moon of Titan where it will descend through the clouds collecting two and a half hours of data using parachutes to slow its descent. It will spend 30 minutes studying the surface of the moon itself relaying data back to the orbiting Cassini about the constituent gasses in the atmosphere, the constituents of any liquid that it lands in and how much sunlight penetrates to the surface. Some scientists believe that Cassini will find oceans of liquid methane and ethane, but any water would of course be frozen solid, as Titan's surface temperature appears to be about -178°C

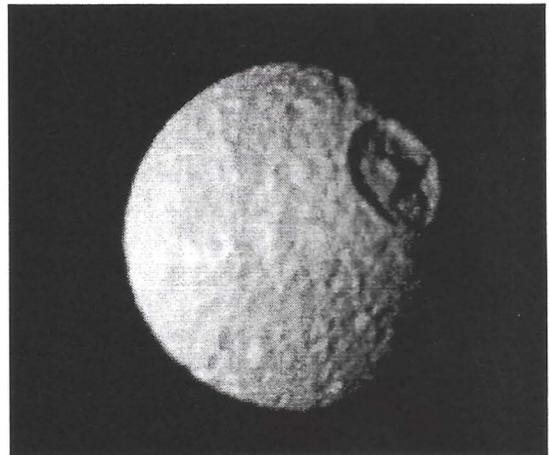
Cassini will orbit Saturn about 60 times and swing by Titan on more than 30 occasions mapping the surface through the clouds using radar. It will also send data from the Huygens probe back to earth as the transmitter on the Huygens probe itself is not powerful enough for its signals to reach earth. Cassini will also send back data about many of the other interesting moons of Saturn and is programmed for several flybys of these.

Enceladus (moon) has a surface of what is thought to be water ice and has various types of terrain including craters, extensive linear cracks, ridges and smooth plains. Some of the surface of Enceladus is relatively young and may be less than 100 million years old.

It is possible that some sort of water volcanism created the young surface. Cassini may throw further light on this.

Iapetus (moon) has a surface, which on one side is mysteriously black, while the other side is white and looks like water ice. The difference is so striking that Jean-Dominique Cassini stated that he could only see Iapetus on one side of Saturn but not on the other. All of the moons of Saturn with the exception of Iapetus and Phoebe are in the plane of Saturn's equator. However, the orbit of Iapetus is inclined to Saturn's equator at an angle of 15° .

Mimas (moon) has a low density which probably means it consists mostly of ice. It is heavily cratered and the largest crater (Herschel) is about one third of the diameter of the moon itself with a central peak as big as Mount Everest. The impact that caused Herschel probably came close to disintegrating Mimas.

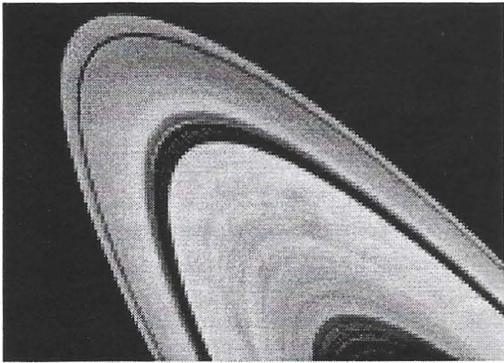


Mimas showing the large crater Herschel.

Tethys (moon) also has a low density and probably consists mainly of water ice. Like Mimas, it has a huge impact crater which is about $2/5$ of the diameter of Tethys. It is thought that at the time of impact, Tethys was not completely solid and therefore didn't disintegrate. Another interesting feature of Tethys is a huge valley called Ithaca Chasma. This is 3 to 5 km deep and runs $3/4$ of the way around the circumference of Tethys.

Cassini will also study Saturn's rings of which there are seven main ones. They consist of fragments of rock and ice and hence are a danger to any space probe which gets too close. After the main

Cassini mission is complete, there may be enough fuel left to task the space probe for an extended mission. One of the possibilities for this mission is a closer look at Saturn's rings. If any damage occurred to the probe at this stage, it would not be such a disaster, as the main mission would have been completed.



The rings of Saturn. The main central gap is known as the Cassini division.

Other options for an extended mission include flying closer to Titan so that it comes into contact with the upper atmosphere. The drag on the space probe would then slow Cassini down and would allow it to go into a permanent orbit of Titan. This would increase the amount of information gained from radar mapping and also give information about the upper atmosphere of Titan. Another possibility would be to escape Saturn's gravity and go to another planet. This could only be accomplished after many flybys of Titan gaining speed from gravity assist each time and would take a long time to achieve.

The main mission is meant to take about 4 years once Cassini arrives at Saturn, but it is difficult to estimate how long the extended mission would last. However, the Voyager space probe is still collecting data on the outer solar system and solar wind 20 years after launch so it is reasonable to hope that Cassini will do as well or even better.

The four years from 2004 should be an exciting time for astronomers and anyone interested in the basic building blocks of life. It has taken 17 nations,

15 years to bring the mission to fruition and the entire cost is estimated at £ 2.1 billion!

Good luck Cassini

A letter was published recently which suggested that people who are interested in Titan should have a look at the photographs on a world wide website which show alien built buildings and structures on Titan. The source of the photographs is stated to be from NASA, although this is of course unproven. You can view these photographs on <http://www.geocities.com/Area51/Rampart/4122/saturn.html>

Here is some of what you will find.



Henge on Titan?



Pyramid with Saturn in the background?

Remote Viewing Experiment

By Mark Glover

An experiment involving remote viewing was undertaken on Sunday 10th January 1999 at the home of John Hall and Elaine Hannah in Allerton - Liverpool. The aim of the test was not necessarily to obtain refined evidence for remote viewing, as we were all too aware of the limitations of our resources as to that end. What we were about though was gaining some relatively small insights into whether it was possible to obtain any evidence at all for the process of remote viewing. It was also a way of working together as a team on something potentially worthwhile and as a means of experimenting with possible plausible, reliable and valid techniques for investigating phenomena like remote viewing. This was to help establish valid protocols for future projects.

Procedure

NB. Some aspects of the methodology involved errors which will be highlighted, as we need to demonstrate honesty about our faults and problems and show others what to look out for when undertaking similar experiments.

On the day of the experiment, seven MARA members met up at the chosen location. These included - John Hall Elaine Hannah Sue McAllister Tony Eccles Jessica Bockler Colin Veacock and myself. We met at around 11 am. Two teams were selected for the experiment - a "sending" or transmitting team and a "receiving" team. At an earlier date Colin had five MARA members choose five sealed envelopes from ten in total which contained the names of locations around Liverpool. To ensure non-interference these chosen envelopes were then labelled with the names of those who chose them and were meant to be sealed within a B5 sized envelope and then within an A4 sized envelope with the remaining unchosen envelopes. However, the unchosen envelopes were inadvertently placed inside the B5 sized envelope instead. As this was not such a crucial error though, we did not worry much about it.

To prove integrity, the opening of both the A4 and B5 sized envelopes by Colin was videoed.

Another video camera was set up to monitor John during the transmission periods. He was the primary receiver and was seated in an armchair with a clock in view next to him. Unfortunately we used a decorative wall clock for want of anything better at the time. This was not, however, the best of instruments for accurate and effective recording of time duration within the experiment. It would have been much better for us to have used a video clock counter, but unfortunately we were not able to do this as we were using a miniature security surveillance type video camera which did not have such a facility. John was blindfolded and wore earphones emitting white noise for the duration of each transmission period or run. This was our limited attempt to use the Ganzfeld technique to prevent John from being distracted or primed in any way by external influences. Ideally of course he should also have been alone in a sound-proof and electrically shielded room, beyond our means as yet.

The transmission periods were designated to last between 20 and 30 minutes depending on the reception of John's impressions. They were initiated following a phone call via a mobile phone from the transmission team as they arrived at each location. Colin, Jessica and Elaine set off as the transmitting team at around 11.30 am by car to the first location. Colin had previously opened one of the envelopes containing the location sites when he got inside the car before they moved off. Elaine was designated as the primary transmitter. Another problem then occurred which meant that the transmitting team had to return to the house. This was because the phone in the house had been switched off! This is a warning that one should always check one's equipment before starting. In saying this however, we did not learn from this at the time because the next error we made also involved poor management of equipment. We did not realise until after we had finished the first run on the first location that although we had turned on both the video and the audio-tape, neither were actually set in the record mode. We therefore

failed to make an audio-visual record of the first run. This was a great pity since it meant that we lost a significant aspect of evidence.

All team members in both teams were encouraged to record their impressions during each run or session on paper, apart from John, who had to just use the audio-tape recorder because of his sensory deprivation (although he did make some precognitive notes prior to each run). Jessica used a Dictaphone, though unfortunately she only recorded her own impressions. Elaine did not make any notes at all, and Colin's notes were relatively scanty.

Results

No statistical tests (quantitative evidence) were used on the data collected for this experiment as it was primarily meant to just be a pilot for future tests, so qualitative (subjective) evidence was all we were seeking for the present.

John correctly and quickly named the first and third locations, which represents what are called "hits". Sue, Tony and myself were also trying to receive information via the transmission and correctly named some elements within some of the locations. These were the locations in order of transmission - the Liver Buildings, St. John's Tower (St. John's Precinct), Liverpool Town Hall, the Shankly Gates at Anfield - Liverpool Football Club and the old Mersey Tunnel (Kingsway). Of course the problem with Tony, myself and Sue being in the room with John was that we will have undoubtedly been influenced by his impressions as he spoke them out loud. However, our contribution was not initially meant to be a particularly crucial part of the evidence, in much the same way that Jessica and Colin were in relation to Elaine. These extra inputs and outputs from both teams were intended to just act more or less as an adjunct to the data collected and attributed to John, but in the end we decided to include them anyway as they seemed to be significant. Perhaps some will see this as an invalid approach.

Both John and ourselves also tried to gain some precognitive impressions of the locations the transmitting team were going to before they arrived. This had been done in

previous research and had proven very successful¹. And indeed we did manage to gain a few possible valid insights through this method. We combined the results of precognitive and present time impressions together in the table below. Unfortunately I have not yet sufficiently isolated them to test for significant differences, but perhaps that does not matter too much as separating them out may not be of any great value anyway. What is perhaps interesting is the apparent relationship between John's impressions and those Jessica was experiencing during the second run. Here is some of what John said first: *"Impression of a statue on a pedestal. Colour-black. Highlighted by the sun. Impression of being in a park. Trees-green. Impression of water again. A lake possibly. Impression of a white sandstone type monument. Hard to make out. And stone-statue type figure of a man, prominent to the nose. Long, longish hair. Moustache possibly. A sort of statue. Sort of white, in the hair...looks like white. Clock again. Clock-white? Pigeons, pigeons, ducks-eyes red. Picking at the ground. Face of a statue-with a horse. The horse is in some sort of a dramatic pose with a rider. Sword-very pointy. Could be another monument pointing a sword"*. He goes on to cite several other locations within the city centre of Liverpool, one of which includes St. John's Tower, but it is the first part which is really of interest when we compare it to Jessica's account as follows: *"I feel quite special in this place, in which we are standing now, because for me its the most touristic place in Liverpool. You've got all the big buildings around you; all these impressive, Greek looking buildings with pillars and they're all so huge.... Then, when I look at the tower, I also see this statue - (she highlights the underlined words as the statue's effect on her is prominent) *not in front of it, but within my view. I don't know actually, who it is; I'm just walking up to have a look. Well, it says 'William Rathbone' on here, but that doesn't actually say very much to me. I'm just reading the inscriptions on the stone. I don't know what it is about this place, but I feel really happy when I'm here. I don't know - it's just the buildings and the surroundings - the park and it leaves a very strong impression. This is Liverpool in a way. It feels old this part. William Brown Street and all those buildings. I just like old buildings - I love them..... Oh, now I'm just eye to eye with a seagull. Its very close to me.**

The seagull is now mixing up with the pigeons." (note John's reference to pigeons and ducks) The importance of Jessica's account of her impressions as they correlate with John's (if psi is operating) may have been generated by the strong emotions she demonstrates. As Elaine took no notes of her impressions of the location we cannot, unfortunately, check how much her impressions match those of John's; and Colin recorded very little. The question is though - whether it could have been these emotions that enabled John to get off to a decent start in gauging the location. The logistical problem with this second transmission site however, was that it was not exactly a good choice because of its confounding environment. That is - far too many stimuli were present in the environment to permit clear transmission of a single object or target, especially as the tower was in the distance. In fact all of the locations were a bit like that, but the second was the worst. This might have made gaining an impression of the St. John's Tower therefore not unlike looking for a needle in a haystack. The table on page 49 crudely shows some of our results in terms of non-statistical correlations and the hits by John. By "hit" I mean when John accurately named the location with sufficient accuracy and efficiency. This was unfortunately not as straightforward as may be assumed by looking at the table. We had problems in identifying what constituted a hit. For instance, when John mentions St. John's Tower (the targeted object of the second run) at the same time as a list of other buildings in Liverpool, not in the location of the tower, can we call that strictly a hit? I think not. It would only really constitute a hit if it came in isolation of other buildings or objects and with conviction in the presence of several other factors concerning the surrounding environment being met with similar conviction. John achieves this significantly very quickly in the first run by describing much of the surroundings of the Liver Buildings without jumping to any other locations. It is as though he is actually there at the location - looking around. Tony had a possible near miss when he described, reasonably accurately, the Shankly Gates at Liverpool FC (the 4th location or run) viz. "Closed gate - fancy in design - metallic". Of course once again we need to bear in mind

that this came in the midst of a flurry of other items which were not associated with the location of the Shankly Gates or the last location site where Tony cites them. The main problem was that Tony did not actually name the gates or their location and his impressions came through at the next run to them. But should we dismiss this? It is still very interesting that he got these impressions at all during the entire afternoon, let alone at the time the transmitting team were at the site. I too picked up the impression of a metal gate in the form of a swinging railway crossing gate. This was within the time period of the Shankly Gates run. We had a false dawn though when Jessica told us that she had told Colin and Elaine that she kept wanting to think of the Loch Ness Monster whilst at the site. This excited us initially since Bill Shankly, the late great Liverpool football club manager (after whom the gates are named) used to call his wife 'Nessy'. We thought Jessica had picked this up psychically until she later remembered that she had seen an inscription at the site which cites Shankly's wife in those terms. What a disappointment! But it shows how eager parapsychological researchers can be to see things in terms of the anomalous rather than the mundane. That point aside, impressions received in remote viewing are often distorted too because it is believed that the brain automatically tries to interpret the impressions it is receiving. For example MARA's consultant psychologist - Dr. Carl Williams' recounts a remote viewing test he was involved in when he got the impression of bright fancy script writing. He visualised it as a chrome car model name on the bodywork of a car. It turned out, however, to be a sign over a shop. The writing was the same but it seems that his brain used semantic references to tag it to something else in his memory. This is part of the reason why receiving subjects are warned not to attempt to analyse their impressions in case they magnify these semantic distortions. However, it also demonstrates the need to make allowances for such possible distortions in deciding the accuracy of impressions. A very good way of aiding the transmission person's responses in remote viewing though is reported on by lecturer in Applied Psychology - Dr. Mathew Smith of Liverpool John Moores University in which a one-way feedback audio-link can be used to connect the receiving person to the

transmitting person. This acts as an encouragement for the transmitting person to keep emphasising certain aspects that seem to be getting through or being effective, providing them with a target to keep aiming for. This is analogous to the game 'hunt the object' where the hider lets you know whether you are getting near to finding the object by saying if you're warm or cold. This does not interfere objectively, however, with the receiver, so it is experimentally acceptable and appears to work. Encouragement of this kind may also work by intensifying ones performance by possibly boosting the psi forces involved and preventing fatigue. Everyone in both teams agreed that it became very tiring towards the end of the experiment, at around 4.30 p.m., especially for John who could not get any impressions at all of the last location. Another dampener on transmission was possibly the fact that it was a very cold day. Cold affects concentration and the absorptive mind-state that has been demonstrated to enhance transmission.

In the final run (the 5th) - Sue picked up St. John's Tower and "sky / blue" for that location. Jessica mentions the tower and emphasises the colour 'blue', although she does not refer to the sky viz. - *"The first thing I see is that there is a lot of blue around. I mean blue signs"*. It might be significant that Sue separates the words 'sky' and 'blue' with a slash. Is this another example of semantic interpretation within her brain of a prominent colour which Jessica strongly emphasises and is transmitting but Sue's brain has perhaps linked it semantically with the sky? However, somehow it knows they are not quite connected, so she separates them with a slash?

I was fortunate to be accurate with two drawings I did of impressions I received of the old Mersey Tunnel in this last location or run (see below). I did not feel it was the Mersey Tunnel however, although I did pick up impressions of the Mersey River under which it runs. I did also get the impression of the transmitting team being near some building work and could visualise pieces of glass, metal or plastic stacked up against the wall of a building or building site. And indeed - the transmitting team confirmed they could see something like that by the car park that was

being finished off by builders at the corner of Hatton Garden.

General discussion

We now feel that the evidence would have been more solid if more drawings of impressions had been made by the receiving team. I did a few sketches myself and was impressed with my accuracy regarding the old tunnel. An image is more convincing because it may convey so much more information than words alone can, and does so more quickly. It also serves to focus the impressions better. Therefore in future I would advise the use of drawings and less words which can contain, it seems, more arbitrary junk impressions to confound the data.

Dr. Carl Williams has also pointed out that we need to be careful when selecting location sites like those in a city such as Liverpool because the sites we chose (apart perhaps from the Shankly Gates) are particularly well known and familiar to most people in Liverpool. However, I tried to test this point out at a MARA meeting by asking people to call out famous Liverpool landmarks from off the top of their heads. There were about half a dozen quick replies and others later but not one of them included any of our chosen locations. I do not think that this proves that Carl is incorrect though, I just think that he may not be absolutely right about his view on this matter, especially when we examine the minutiae of impression data we have regarding the sites in our experiment. However, I suggest we still take his view on board and concentrate in future on single non-familiar targets.

Quantum mechanics

Given the possibility that quantum wave consciousness exists whereby individual consciousness purportedly can become, or innately already is, fused with a universal or cosmic consciousness, it may be possible for data to be accessible from any chosen location regardless of space and time. Experiments done in 1986 by the French physicists - Aspect and Grangier demonstrated conclusive correlations between polarised photon particles split from an original particle in a way that suggested that though apparently separate, they are still connected in a way that

behaves like consciousness and is regardless of space or time². What may be happening in that case with remote viewing is that selective access to a specific location is obtained dependent upon the determination of the subjects involved and their state of mind, or should I say - level of consciousness. A definition of the full implications of this principle of non-locality which was proposed by the German physicist and philosopher - Werner Karl Heisenberg in 1927, and also termed an 'uncertainty principle' is as follows: *"Reality at its most primary level consists not of fixed actualities that we can know, but rather of all the probabilities of the various fixed actualities that we might know ...when any physical process first starts, it sends out 'feelers' in all directions, feelers in which time and space may be reversed, normal rules are violated, and unexpected things may happen"*³. This non-locality of consciousness may then be how remote viewing operates. That is, it is not so much that a message is transmitted by a sender as that the consciousness of the receiver is able to reach out toward the sender and somehow 'feel' what they are perceiving. This may be significant in view of what I discussed above about the emotion or feelings Jessica was experiencing about the second location. In other words, this may occur because individual consciousness is fundamentally a part of a totality of consciousness to which everything is ultimately joined to or with. Knowledge accessible to individual consciousness becomes all encompassing and yet retains an affinity for selection. This fundamental or background consciousness that may underpin all individual consciousness is what the physicist David Bohm referred to as an 'implicate order'⁴. It is very significant that persons undergoing the near death experience (NDE) testify to having an ability to know and understand all reality during their experience and that some of those experiencers return with psychic abilities⁵. Is it that their experience catapulted, or rather collapsed, their consciousness back into a state from where it ultimately originates or manifests and where it was able to merge with a universal or totality of consciousness in the same way that a wave on the ocean merges back into the sea from which it was derived, only to re-emerge at some later point⁶. This may seem like a diversion to the

reader but remote viewing and many of the other aspects of parapsychological research, like NDE's, are inevitably and inextricably linked with consciousness and its nature. Therefore we should see them as connected and mutually inclusive or relevant⁷.

Morphic resonance

Another possible cause for the transmission or process of remote viewing information may also be morphic resonance as proposed by the biologist Rupert Sheldrake⁸. The theory involves the premise that all phenomena are manifested according to the formation (causative formation) of invisible resonating force-fields which act as frameworks for the various characteristic life-forms and other phenomena as they manifest. What Sheldrake has suggested is that these force-fields are similar (though not of the same nature) to magnetic lines of force, as can be highlighted by iron filings. He believes that these morphic fields are connected to, interact with or interpenetrate other morphic fields, especially those belonging to the same species of animal or where emotional bonds are formed. If this is the case it might be possible or plausible that information about remote locations could be transmitted between individuals via these fields as they connect or interact with one another, especially where the people know each other very well, as John and Elaine, his partner, do. This was why we chose them, although it has been suggested that ideally one should use random neutral subjects from a population who are absent of the apparent psi abilities which John and Elaine seem to possess. We therefore need to reconsider these characteristics and aspects in future ventures because both approaches may need separate but equal evaluation.

Coincidence

The most likely or probable explanation for corrects hits (especially to the sceptic) might be coincidence or chance. The question is, however, whether there really is such a thing as chance in the first place. The psychoanalyst Carl Jung called coincidence synchronicity. Synchronicity is a process of causal or connective relationships between two incidents, phenomena or individuals. It occurs according to Jung because of the existence of a collective unconsciousness of humanity. Also, according to chaos theory,

every single event from the microscopic to the macroscopic results in and is the result of all other events as they occur. This is because each event acts as a cause for other events to occur. These causal effects are virtually incalculable because they are occurring simultaneously and on such a vast or cosmic scale throughout the entire universe. However, they may explain or account for the intricate mutually inclusive relationships operating within manifest reality.

Conclusion

The experiment which we undertook was undoubtedly flawed in several ways (not least of all through the improper or inconsistent recording of both transmitted and received data), but that does not mean that it had no validity. There were apparently non-statistically significant hits scored by John and some possible correlations regarding impressions gained by others in the receiving team. It may well be that two aspects or modes of transmission exist in remote viewing. One is imaginative and the other emotional or semantic. Imaginative transmission might involve a vehicle, or carrier whose character is that of reinforced imagery, while the emotional vehicle might involve one that involves deep feelings about an environment. Both of these of course would be operating via a psi vector (whatever the force or process is that psi involves). This may be understandable if we were to perhaps consider that both types of mental activity

might be represented as waves or frequencies set up within some sort of ever present field or force that connects all phenomena, as is expressed in the idea of quantum wave consciousness and morphic resonance above. In the final analysis then, even if we had conducted our experiment without making the errors we made, and under more rigorous conditions, it would still not be possible for us to confidently state that our evidence was strictly objective. Like phenomena such as NDE's we need to adopt a multi-disciplinarian approach. This is achieved by using the evidence for the existence, operation and validity of concepts like quantum mechanics, morphic resonance, Jungian psychology and other theories, some of which have not yet even been hypothesised or tested. These theories are then balanced against anecdotal or subjective evidence - together with the use of experimental tests, like those using the Ganzfeld in remote viewing. In tackling the question of consciousness and reality in this fashion we may be able to gradually and eventually arrive at a grand theory about the nature of psi, consciousness and reality itself, the advantages of which would undoubtedly be to enrich our lives enormously, even unimaginably. Once again, let us appreciate the extremely steep learning curve we are operating upon and continue to improve our methodology and analysis in an attempt to objectively strengthen the inference that psi either does or does not exist and function as part of consciousness and reality.

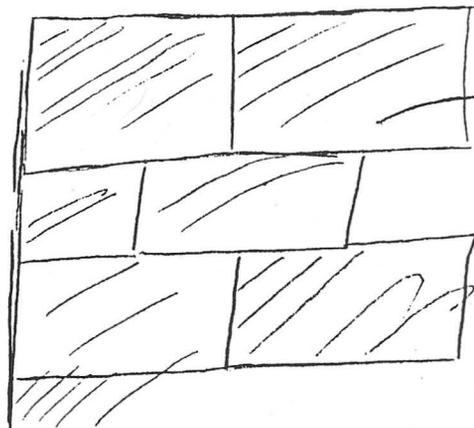
REFS.

- 1 Broughton, R. (1991) *Parapsychology: The Controversial Science*. Rider: London.
- 2 Klein, E. (1996) *Conversations with the Sphinx: Paradoxes in Physics*. Souvenir: London.
- 3 Margenau, H. (1967) *ESP in the framework of science*. From Symthies, J.R.(ed.) *Science and ESP*. Routledge & Kegan Paul. Cited in Roney-Dougal, S. (1991) *Where Science and Magic Meet*. Element: Shaftsbury, Dorset.
- 4 Bohm, D. (1980) *Wholeness and the Implicate Order*. Routledge & Kegan Paul: London.
- 5 Morse, M. MD & Perry, P. (1993) *Transformed by the Light*. Piatkus: London.
- 6 Reaney, D. (1991) *The Death of Forever: A New View of Human Consciousness*. Souvenir Press: London.
- 7 Jacobson, N. MD (1971) *Life Without Death*. Dell: New York.
- 8 Sheldrake, R. (1995) *A New Science of Life: The hypothesis of formative causation*. Flamingo: London.

Table indicating the number of correlated non-statistical impressions (*) and direct hits (HIT) by the receiving team. 'Nothing' indicates no impressions while 'nil' means no correlated impressions were made. The results also include precognitive impression data.

	John	Tony	Sue	Mark
LOCATION				
Liver Buildings	HIT **	*****	*****	*****
Liverpool Town Hall	HIT	***	****	****
St. John's Tower	**	nil	nil	**
The Shankly Gates at Anfield Liverpool FC	**	nil	*	***
Old Mersey Tunnel (Kingsway)	Nothing	*****	**	*****
TOTALS	2HIT + 6*	13*	13*	20*

Below are two sketches made by the author. The top one could be relevant in terms of the type of stone-work on the old Mersey tunnel entrance and where the transmitting team were standing - at the bottom of William Brown Street by the wall of St. John's Gardens. The wall surrounding the gardens consists of yellowish stone and has serrated or 'dental' (tooth-like) coping with some ironwork. The rim like structure in the sketch below is a little like the walls on either side of the tunnel entrance which are dam-like.



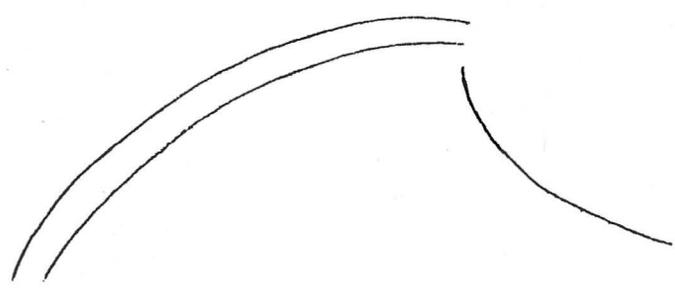
Dark & dingy

An iron fence

yellowish
coloured
stone

'V' shape
- serrated edge

A rim like structure



An Urban Myth: The Cuerdly Dragon

By Mark Rosney

Nestled quietly on the North Cheshire plains, near the banks of the River Mersey, rests the borough of Halton. At first glance its two principal towns, Runcorn and Widnes, which sit on either side of the river, seem very ordinary and uninteresting. However, hidden beneath the sprawling mass of chemical industries and urban development is an area rich in myth, magic and legend.

One such legend, from the Dark ages, tells of the exploits of Robert Byrch, a blacksmith who lived and worked in Cuerdly marsh, situated by the banks of the river Mersey in Widnes.

Dark age Halton, unlike today, was mostly covered in dense leafy forest which gave way to waterlogged marshland nearer the river. The forests were home to a myriad of wild beasts, ranging from wolves to deer and the occasional wild hog. Nearby, the village of Farnworth (where Robert Byrch retired to in the evenings) was pleasantly situated on the crest of a small promontory on the edge of the trees, but still deep enough within the forest to be 'off the beaten track', out of the way of the regular travellers who thronged the main highways through the borough.

Robert Byrch's smithy was located at Cuerdly, a marshy area between Farnworth and the river. Here the local villagers, including Robert, let their livestock roam, grazing on the lush marsh grasses.

Robert gained a fine reputation for the quality of his work, and he was sought out by knights and farmers from across the land. The strength of his metals was second to none and his craftsmanship and ingenuity was legendary.

By day the village and the marsh were tranquil and idyllic, a peaceful haven away from the feudal wars which ravaged most of England at that time. Only the occasional wandering minstrel or party of hunters in search of wild deer or boar would disturb the peace. As night fell, however, it was a different story.

Due to the pagan traditions passed down through the centuries, it was believed that the forests were also the home of many fantastic creatures, spirits and phantoms that inhabited the nearby caves, ancient trees and the inky depths of the deepest lakes. It was generally

believed that when darkness fell, all the strange beasts would emerge from the heart of the forest to wander around and terrorise the inhabitants of the region. The most formidable of all these beasts was the Dragon, a carnivorous monster, half eagle and half lion, which regularly came, swooping low over the marsh, preying upon the villagers' cattle.

The Dragon was a huge beast, at least fifty feet long with an even greater wingspan. Its scales glistened like fiery coals in the dying rays of the sun, as it flew over the marsh in search of its next victim. The sight of this beast struck terror into the hearts of the villagers, who could do nothing to stop its torments.

Robert was lucky at first, as his forge fire seemed to keep the beast away from his livestock. Being untouched by the problem he went about his business as usual. That is, until one fateful November day, when the Dragon overcame its fear of the raging fire, and took away Robert's prize ox. Robert Byrch decided that 'enough was enough' and hatched a plot to get his revenge.

He fashioned a stout iron cage, large enough to hold himself in, and covered it with a cow hide. He also made a light, shortened double-edged sword, which could easily be wielded against his foe.

Many days passed before the Dragon was seen again, spiralling high in the sky above the marsh. Robert climbed inside his special cage and waited. By his instruction all the other livestock had been removed to the safety of the forest, making Robert's 'cow' an irresistible target for the ravenous beast.

The Dragon swooped and its talons sank into the cow hide, gripping the cage in the process. With one beat of its enormous wings the scaled monstrosity was airborne, and with it, Robert in his cage.

With all his might Robert plunged his sword into the Dragon's body. Blood spurted out from the gaping wound, and the beast screamed and writhed in agony. Robert looked down only to see, far below, the meandering river and lush forest. At this point he realised his mistake, as the beast seemed to be faltering, spiralling down towards the ground below.

In desperation Robert attempted to cover the

beast's wound in order to halt the flow of blood. Somehow he was successful and the Dragon eventually limped home to its lair on the Runcorn side of the Mersey, near the aptly named Rock Savage. The Dragon landed safely and Robert lashed out again, weakening the beast further. When he felt it safe to do so, he climbed out of the cage and finished the beast off, turning the banks of the river red with the slaughter.

He returned home, triumphant, with the beast's head as a trophy. He was received by his fellow villagers as a hero and a saviour, and news quickly spread throughout the land of his heroic deed. The news soon reached the king's ears, and he deemed that Robert should now be known as 'Robert the Bold'. As a reward the king granted him a tract of land near Cuerdly, which to this day is still known as Bold. Here Robert founded the Bold family, who remained in the area for many centuries and became one of the wealthiest families around.

Although the story is a legend, there are some curious clues to support its authenticity. The Bold family was one of the oldest families in the country. Although it isn't possible to find direct evidence to link Robert Byrch with the family, the lineage can be traced as far back as the Dark Ages. The Bold family's crest depicted a dragon, an image which was also used by the feudal Welsh, who were mortal enemies of the English. Why use a crest which would appear

to offer allegiance to your sworn enemies? In support of this, the Griffin, or dragon, symbol also appeared on the seals of the Barons of Halton (see illustration at bottom of the page), again a strong connection between the Dragon legend and the area.

There is however one final twist in the saga. In the church at Farnworth a 'skin', which hung over the Bold family pew for centuries, fell to the ground in 1870. This dusty relic was examined and found to be the untanned hide of a cow, which bore strange claw like marks.....

In the aptly named Griffin inn at Bold heath, and the Ring 'o' Bells at Farnworth, pictures depicting Robert Byrch, doing battle with the dragon, can still be seen.

Sources

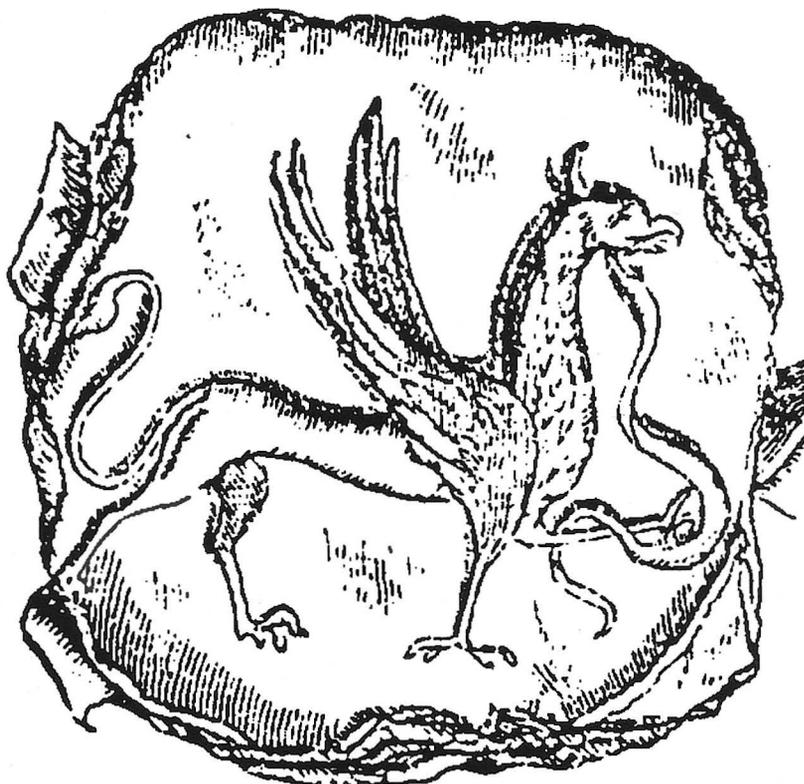
Mysteries of the Mersey Valley by Jenny Randles and Peter Hough.

Old Widnes and its neighbourhood by Charles Poole

Traditions and customs of Cheshire by Christina Hole

A History of Widnes by G.E.Diggle

Also many thanks to Roger Ellison for additional research





PSI-MAN SAY'S.

TODAY PSI-MAN INTERVIEWS A FAMOUS MASS MURDERER.

HELLO, AND HOW ARE YOU?

NOT PARTICULARLY, AND MY NAME'S NOT SIDNEY!

HELLO SIDNEY, DO YOU WANT TO DIE?



WHAT'S YOUR FAVOURITE SCARY MOVIE SIDNEY?

I'M MORE OF A WALT DISNEY PERSON REALLY.

ARE YOU ALONE SIDNEY?

NO... NO I'M NOT.

IS YOUR BOYFRIEND HOME SIDNEY?

BOYFRIEND! WHO'S BEEN TALKING? AND FOR THE LAST TIME, MY NAME'S NOT SIDNEY.



HERE I COME SIDNEY

THIS INTERVIEWS GETTING OUT OF HAND.

HA HA HA

THAT SETTLES IT. NO MORE INTERVIEWS WITH MASS MURDERERS.

MEDIC

