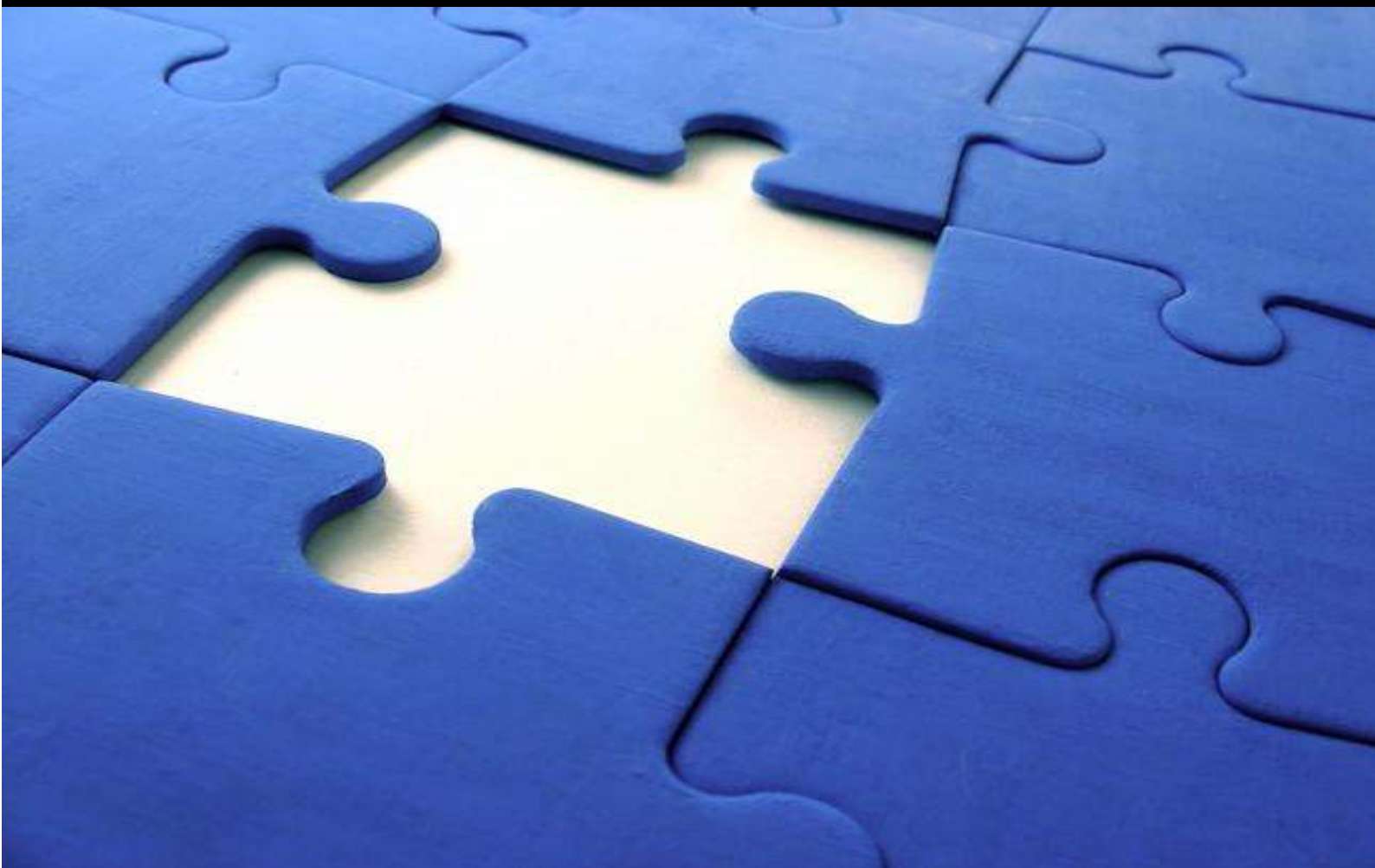


paranormal site investigators



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Contents Include:

Experimentation: EVP, ITC and Trigger Objects
Equipment: The Role of Chance
RNG/RSPK Case Study
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Book Review: A-Z Spiritualism
Book Review: Great Paranormal Clash
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Contents

Conclusions on Investigation Experimentation: EVP, ITC and Trigger Objects <i>Swale, T. & Wood, D.</i> 3	3
Investigation Equipment: The Role of Chance <i>Wood, D.</i> 13	13
Non-Random Output of a Random Number Generator During an Apparent Poltergeist/RSPK Experience: A Case Study <i>Schumacher, D.</i> 19	19
Expectation and the use of Séances during Field Investigations <i>Wood, D. & Wooff, N.</i> 26	26
Book Review: The A-Z Spiritualism Dictionary <i>Swale, T.</i> 32	32
Book Review: The Great Paranormal Clash <i>Swale, T.</i> 33	33
Report of an Investigation into Stanton Park Farmhouse, Nov 08 to Jan 09 <i>Bakewell, S., Gasson, L., Gould, M., Haskins, R., O'Halloran, C., Sewell, N., Sherwood, S., Swale, T., Wills, S. & Wood, D.</i> 36	36
How to Contribute to this Journal 147	147

Conclusions on Investigation Experimentation: EVP, ITC and Trigger Objects

Trystan Swale and Dave Wood
Paranormal Site Investigators

This paper presents three methods often used as *ad hoc* protocols during investigation fieldwork: electronic voice phenomena (EVP), instrumental transcommunication (ITC) and trigger object experiments. The background, controversies and flaws of these methods were introduced, along with protocols designed to minimise common flaws with associated with such methods. Results of experimentation over the course of twenty fieldtrips over a three-year period were presented, including 148 trials of EVP and trigger object protocols and approximately 7,200 ITC images. It was found that where a controlled and recorded environment were used, along with scientifically meaningful analysis, that no meaningful data was captured. However a discussion of false positives, including some captured during the three year study, allowed the discussion of possible future research and conclusions to be drawn about whether these procedures are methodologically and ethically justifiable in an investigation and fieldwork setting.

Introduction

Paranormal researchers and investigators have long attempted to incorporate *ad hoc* experimental designs into their fieldtrips. Some such 'experiments' were developed independently of haunting case investigation – for example Electronic Voice Phenomena and Instrumental Transcommunication – whilst others, such as trigger objects, were designed in response to the need to gather objective evidence during the course of such investigations (see below).

Proponents of such methods have argued that they are a valid tool for gathering objective evidence in haunting cases, in an attempt to prove the existence of psi forces. Others have argued that the approaches are inherently flawed, and any evidence gathered is the result of misperception and bias (see below). In either event it is clear that these approaches are assumption-led and that there is no viable mechanism proposed to account for the phenomena these methods attempt to measure as psi events.

There is, seemingly, a great deal of 'evidence' in the public domain for all three of these methods. However, this evidence tends to be flawed or anecdotal (see below); in either case unconvincing to the research community.

This paper has examined three years of field-based experimentation into these methods and attempted to find out whether there is any objective evidence to support the use of these methods – whether these phenomena exist, and poor methods have been a barrier in gathering evidence – or whether there is no objective evidence to be gathered beyond misperception.

Firstly, each of these methods will be briefly explored:

Instrumental Transcommunication (ITC)

Although originating as a term to specifically describe the alleged means of observing images of the dead through television screens (Berger et al, 1992), Instrumental Transcommunication's (ITC) contemporary usage relates to any attempt to communicate with the deceased through the medium of electronic equipment (Clark, 2008). Examples of such equipment range from tape recorders (Jürgenson, 1981) to the spell checking facilities of word processing software (Rousseau and Rousseau, 2005). The particular format of ITC used as an investigative method in this study relates to the Klaus Schreiber Method (Clark, 2008). Developed with apparent paranormal guidance via means of other ITC practices (Schaefer, 1989), Schreiber obtained images by focussing a video camera onto a television screen, positioned up to three metres away. The Ultra High Frequency output of the video camera was subsequently connected to the television (Holbe, 1987) by means of audio visual connecting lead. By using the video camera to zoom in on the fringes of the recursive image, the on screen effect of a pulsating light was produced. It was from this output that video footage could be captured and analysed on a frame by frame basis (Reed, 2009).

Published examples of Schreiber's products are vivid representations of historically and culturally renowned individuals including King Ludwig of Bavaria and actress Romy Scheider (Schaefer, 1989). Both images appeared, accompanying spoken announcements obtained through Electronic Voice Phenomena recordings (Schaefer, 1989), see below.

Failure of researchers to replicate the quality of Schreiber's images beyond the 'meagre' (Berger et al, 1992) and accusations of fraudulent practice (Köberle, 1988, 1989) have shrouded the method leaving proponents to fall back upon inferior quality images – readily available on the internet – and assumptive *ad hoc* hypotheses as means of justifying quality differences (Berger et al, 1992). It has also been noted that recognition of apparent faces in such images may be no more than pareidolia, the mind being 'hardwired' to recognise the features of human faces, even in otherwise random imagery (Sagan, 1995).

This paper presents three years of evidence collected utilising the Schreiber Method of ITC.

Electronic Voice Phenomena (EVP)

Electronic Voice Phenomena (EVP) is a specific method of ITC, involving alleged communication with the dead via electronic audio recording equipment (Laurent 2001). The first identified example of an EVP recording was made by Friedrich Jürgenson in June 1959 during an attempt to capture birdsong using a reel to reel tape recorder and external microphone. On playback, Jürgenson's recording was interrupted by a 'hissing or static sound', over which a male began to speak of 'bird songs at night' in Norwegian (Jürgenson, 1981). Noting other similarly unexpected voices interfering with advertised radio broadcasts, Jürgenson developed the technique of tuning a radio receiver between stations: voices would appear on frequencies where, typically, only white noise would be found. He began to record the output, allegedly receiving communication from his mother, a late childhood friend and deceased historical figures including Stalin and Hitler (Jürgenson, 1981).

Repeating and expanding upon the methods of Jürgenson, Latvian psychologist (Baruss, 2001) Konstantin Raudive claimed to have compiled over 72,000 examples of EVP in the period between 1965 and 1971, mainly against a backdrop of

radio static (Raudive, 1971). Recordings were considered paranormal if primed listeners agreed with Raudive's personal interpretation of the voices in a methodologically flawed listening test (Keil, 1980). Through this unscientific listening test Raudive characterised the features of genuine EVP voices: speaking 'very rapidly, in a mixture of languages, sometimes as many as five or six in one sentence', adopting a 'definite rhythm' which demonstrates 'a shortened, telegram-style phrase or sentence' where 'grammatical rules are frequently abandoned and neologisms abound' (Raudive, 1971).

It is only more recently that EVP has been used as an investigative tool in locations specifically associated with hauntings (Townsend, 2007). As a means of gathering evidence for a haunting, the appeal of mass produced analogue and digital recording equipment is clear. Affordable and simple to use, output can be analysed directly from the device or with the assistance of freely available sound editing software. However, there exists a threshold for obtaining erroneous results due to a range of factors:

Misperception

David Ellis (1975) conducted his own listening tests based upon thirty seven examples of Raudive's recordings from 1971. Participants were not primed and six of Raudive's apparently multilingual examples were reinterpreted as solid blocks of spoken English. One example was identified as an English broadcast made on Radio Luxembourg (Ellis, 1975). Such differing individual perceptions may be due to the human process of understanding speech. Phonemes are the individual sounds which construct words; for example, the word 'look' consists of three phonemes: l / oo / k. Phonetic recognition is 'built into our memory', the mind being able to identify up to twenty phonemes per second (Townsend, 2007). In situations where random noise is present, such as from background noise or Raudive's detuned radio, we may identify sounds similar to spoken phonemes and interpret them in kind (Townsend, 2007). This is an auditory form of apophenia, 'whereby we spontaneously perceive connections and find meaningfulness in unrelated things' (Alcock, 2004).

Human influence

Keil (1980) has suggested that speech or sound generated by participants within EVP recording sessions may provide opportunities for misidentification and misperception respectively.

Radio interference

It is possible that a proportion of EVP recordings may feature genuine voices, albeit those of terrestrial radio broadcasts picked up by recording equipment (Ellis, 1978). Components such as an external microphone input and lead may act as an antenna to receive radio signals (Townsend, 2007). Alongside such Radio Frequency Interference (RFI), cross modulation of radio signals may further explain the presence of unexpected voices on recordings (Alcock, 2004).

Recording hardware

Most voice recording devices contain an Auto Gain Circuit (AGC) to ensure constancy of volume across recordings. The AGC may amplify background noise during periods of quiet leading to greater opportunity for listener misperception (Townsend, 2007). Likewise, it may act to emphasise the sound of any unexpected RFI (Townsend, 2007).

Presented in this paper are the results of EVP experimentation across three years. Taking into account the limitations outlined above, steps were taken to restrict

external influences. To minimise the possibility of cross modulation, radio produced background noise for recordings was discarded in favour of digitally generated white, pink and brown noise. Sessions were video recorded to identify possible causes of ambient and human noise sources which may influence results, although such a measure cannot be considered exhaustive. Experimentation by Ellis (1978) recording EVP in a radio shielded room produced positive results which were discounted due to lack of adequate sound proofing. Macrae (2005) outlines equally positive results obtained in a laboratory screened against both influences. In the context of investigating a haunting, the practical difficulties of ensuring adequate sound proofing and radio frequency shielding during field visits means that such influences could not be eliminated. However, EVP remains an assumption led approach and appearance of a perceived voice on a recording does not necessarily imply a paranormal origin.

Trigger Objects

Cases of hauntings have long been associated with the movement of objects (Gauld & Cornell, 1979) as an alleged psi event. Various irrelevant claims abound about how long this association has lasted. Early examples included *Lithobolia* (Chamberlain, 1698) – the rock throwing demons – and the 1662-3 Drummer of Tedworth (Hunter, 2005). Researchers tend to discuss hauntings involving the movement of objects – somewhat unhelpfully, from a neutral perspective – as ‘poltergeist’ cases (sometimes termed RSPK: recurrent spontaneous psychokinesis); the most of famous of which is probably the Enfield poltergeist case (Playfair, 1980). Researchers have advanced several theories about the cause of movement in such cases, ranging from xenonormal (unidentified but normal) events, fraud, delusion and underground running water (Henry, 2005) to electromagnetism (Roll, 2003) and the unproven agent-orientated interaction between the mind and physical environment (Roll, 1977).

In attempting to gather evidence for the movement of objects in haunting cases ‘trigger objects’ (or similar) have long been used; including in several high-profile cases including the 1937 investigation of Borley Rectory (Price, 1946) and the South Shields Poltergeist case (Hallowell & Ritsen, 2008). Methods of placing trigger objects vary – from placing of powder to drawing around objects and placing video cameras – but all focus on the aim of trying to verify any potential movement (Huff, 2007). Huff (2007) provides a useful summary of recent cases where trigger objects were found to have moved, but in each case methodological flaws seemed to present a barrier to verification.

Whilst the practice of using trigger objects is seemingly popular, no evidence seems to have emerged that satisfies the research community. Whether this is due to lack of resources, methodological flaws or a lack of the phenomenon in the first place is debateable. On this latter point, certainly claims of objects being moved, not noticed at the time, are widespread but the possibility of misperception or natural causes is a strong one.

This paper presents evidence of methodologically-sound trigger object experiments over three years. Under the methods used, see below, any movement of objects could be objectively verified. It is hoped these experiments can shed light on whether trigger objects do move and whether they are a valid experiment.

It should also be noted that the use of trigger objects is an assumption-led approach. Even if an object were to move in a haunting setting, then suggesting that the movement has anything to do with the haunting is another matter entirely.

Method

The results of twenty fieldtrips across fourteen locations and over three years were included. The common format for these fieldtrips were groups of participants, numbering between eight and twelve, being split into two groups and deployed across four areas each in every fieldtrip. These four sessions varied in length from thirty to forty-five minutes each. A stable group was used across all fieldtrips, with gradual changes in its composition over time. All fieldtrips followed the exact same procedure.

Instrumental Transcommunication (ITC) Procedure:

One ITC experiment was conducted in each of ten investigations across ten locations over three years. The experiment was conducted prior to the start of the field investigation in each case.

The footage from each experiment was uploaded onto a PC and was broken down into individual frames: twenty four frames for each second of footage. The approximate total for each experiment was 720 frame stills. These stills were independently examined by one person involved with the procedure, and two people not involved with the procedure.

The procedure used in each case was as follows:

- A Sony Handycam HC14e camcorder was set on a tripod 36 inches from a CRT television screen; each was set to the same height.
- An AV lead was connected between the camcorder and television screen, so as to allow the screen to display the real time recording of the camcorder.
- The video camera was zoomed in into the screen, creating a feedback loop of 'static' visual information.
- The area between the camcorder and screen was vacated and the camcorder was set to record for thirty seconds.

Electronic Voice Phenomena (EVP) Procedure:

Each fieldtrip comprised eight participant sessions, with the exception of three fieldtrips comprising four participant sessions each. During each of these sessions an 'EVP experiment' was conducted using a standardised procedure. A total of 148 EVP experiments were conducted in this way.

Following the procedure the audio files were transferred to PC and analysed, independently, by one person involved with the field investigation and one person totally unconnected with the field investigation. All sessions were recorded by at least one video camera.

The procedure and materials used in each experiment was as follows:

- Each experiment was conducted within a session where participants were conducting field observation.
- A digital voice recorder was set twelve inches from a CD player. Each participant (two per experiment) was issued with a set number of questions to ask at twenty second intervals. The scene was recorded by video camera.
- During experiments all participants across the whole building would remain seated and silent. No movement was permitted and speaking was only allowed by participants asking the list of set questions. If participants needed to relay an

important message (for example, health and safety) they were briefed to speak loudly so that analysts could account for their voice.

- Each experiment lasted four minutes, excluding set up, and comprised:
 - Two minutes 'control' condition. In this condition the voice recorder was set to continuous record. The CD player was set to play a CD but no questions were asked.
 - Two minutes 'experimental' condition. In this condition the voice recorder was set to continuous record. The CD player was set to play a CD but the list of questions were asked.
- The 'noise' played during conditions were as follows:

Session Number	Team A 'Noise' Condition	Team B 'Noise' Condition
1	White noise	No noise
2	Brown noise	Pink noise
3	Pink noise	Brown noise
4	No noise	White noise

Trigger Objects Procedure:

Each fieldtrip comprised eight participant sessions, with the exception of three fieldtrips comprising four participant sessions each. During each of these sessions a 'trigger object experiment' was conducted using a standardised procedure. A total of 148 experiments were conducted in this way.

Following the procedure, the video files were viewed by an analyst.

The procedure and materials used in each experiment was as follows:

- Four locations were studied during each field investigation. The two participant groups observed in two locations during any given session. A trigger object experiment was set up in each of the other two locations during each session. Hence, each area of study was subject to two trigger object experiments per fieldtrip.
- Two participants placed a blank piece of A4 paper on stable surface. A coin was placed on the surface and drawn around with a pen.
- At least four photographs were taken immediately.
- At least one video camera was set up to record the scene, ensuring the whole surface was covered.
- The object was left with a recording camcorder for the whole session.
- The object was photographed at least four times at the end of the session.
- Where any movement had seemingly taken place this was reported to experimenters.

Results

During ITC analysis each analyst identified between zero and ten images that appeared to have meaning. None of the images with identified meaning were commonly identified between either two or three of the analysts. Each image with identified meaning was presented again to the other analysts. In no cases did analysts concur that a meaningful image was existent.

Following analysis five 'voices' were identified across the 148 EVP experiments. In each case the video footage was examined and each voice was found to be a participant passing on important information or inadvertently breaching protocol by speaking during the procedure.

On four occasions of 148 experiments participants reported that a trigger object appeared to have been moved, upon participants returning following the session. On three of these occasions the video camera verified that the object had, in fact, not moved at all. On the remaining occasion it was verified that the object had moved; however the protocol had been breached by the object not being placed on a flat surface. This error accounted for this one verified movement.

Discussion

Where the key feature of previous fieldtrip-based evidence of ITC, EVP and trigger objects experiments have been poor methods and analyses leading to results being questioned, these experiments sought to control these methodological flaws as much as possible and used valid systems of analysis.

In the case of ITC the analysis of 'images' was the key flaw identified in the past. In such flawed procedures used by some researchers, where images were flagged up as 'meaningful' and presented to others, those others were primed as to what to expect. Where analysis took place in this study between independent parties no images were highlighted as both a) meaningful and b) identified by multiple analysts. Even if these conditions had been fulfilled a 'paranormal' explanation would not necessarily be relevant, in any case. The lack of meaningful results in these ITC experiments underlines the existing idea that ITC 'evidence' is simply the result of subjective misperception.

Over the 148 EVP experiments, five clear 'voices' were identified. Due to the protocols involved, sessions were recorded by video camera and a 'human' voice of a participant passing on important information was found to be the cause in each case. Whilst common flaws of EVP procedures were minimised – including the use of digital recorders, quiet recording conditions and digitally-created noise – the existence of these xenormal voices (that is, not identifiable on analysis but identifiable with further information) remains of interest. Analysts were not able to identify these 'normal' voices as participants, and in some cases participants did not remember speaking during these EVP sessions. This highlights that the fallibility of relying solely on human perception in analysis and that using human memory as verification is inherently flawed.

In four of the 148 trigger object experiments some form of 'movement' had been reported by those setting up/taking down the experiments. Only the objective recording of the scene provided the objective evidence: that no movement had taken place; that the participant had likely mis-remembered the precise placing of the object. The one case out of 148 where movement was verified was explained by human error; not identified by the participants and was only verified by camcorder.

Limitations

There were various inherent limitations associated with the phenomena concerned. Specifically, where EVP and ITC are likely results of apophenia the

(necessarily) subjective interpretation by analysts is not without potential problems. Although these problems were minimised by using multiple analysts, results are still potentially flawed in part.

Although all reasonable efforts were made to control the environment it was never possible to achieve full control of the environment outside of a laboratory setting. Specifically, interference of sound recordings by environmental factors may have contributed to any interference that might have (but did not) take place during EVP experiments. Also, had a trigger object moved, it is possible that vibrations not captured by video camera could have explained the effect.

An undesirable aspect of the experimental procedure is that: where the environment was controlled to reduce false positives, these false positives were not produced and studied (with the exception of the above cases).

Areas for Further Study

The study of false positives generated in a controlled and monitored environment might be an illuminating area of further research. Anecdotally, since PSI (Paranormal Site Investigators) introduced its new investigation method (Wood, 2008) some surprising false positives have emerged. In this method audio recorders are left at pre-planned locations and left to record continuously. This procedure has nothing to do with EVP, but happens to mimic EVP protocols used by some researchers. Analysts happen to have noticed voices recorded – verified to be participants in a nearby room, by video camera rather than the perception of the analyst – were amplified and distorted by the Auto Gain Circuit, and sound strikingly similar to stock EVP ‘evidence’ captured using such similar protocols!

There remains some scope for further investigation into EVP. Even though 148 trials were conducted the possibility remains that a larger number of trials may produce more tangible results to analyse. A greater level of control would be needed to be fully confident that potentially confounding factors could be eliminated, such as: adequate soundproofing, radio-shielding, purely digital equipment and the removal of the human factor.

Some researchers have suggested varying trigger objects with items ‘meaningful’ to any ‘spirit’ that might be present. One challenge here would be ensuring that objects were equally sturdy and not liable to movement; or, alternatively, focussing on one location over a long period of time. However this approach is assumption-led and may lead to accusations of bias.

Implications and Conclusions

One possible implication of this paper is the idea that investigation-based experimentation is not worth conducting. Frequently such experiments involve *ad hoc* procedures with poor methods and analysis. Such flawed procedures are more likely to produce false results.

For example, EVP experiments where: non-digital equipment is used, a detuned radio is used or where human factors are not controlled is known to lead to false results. This research demonstrates that – where all reasonable controls are made, considering the fieldwork setting – useful results are not forthcoming. Where poor methods and analysis leads to false positives this is neither scientifically useful, nor ethical. Similarly, employing trigger object experiments without sufficient control and monitoring can produce false positives; but where these factors are controlled

meaningful results are not produced. This study also observed that individual perception of 'moved objects' sometimes does not correspond with reality. Where objective recording does not take place these false positives may be viewed as evidence.

False positives produced in uncontrolled and insufficiently monitored environments are not scientifically useful for obvious reasons, but the ethical implications should be borne in mind. Where a false positive is presented as possible 'evidence' for paranormal phenomena this has the potential to cause great distress amongst clients. A researcher may capture a distressing EVP voice, falsely, and this might 'contribute' to a haunting and cause unacceptable harm.

Despite the fact that ITC, EVP and trigger objects are probably unacceptable practices from a scientific and ethical viewpoint, it is likely to continue in many quarters. Researchers should bear in mind all the flawed methods and analyses that can produce false positives, try to improve methods where possible and be ethically aware when analysing and presenting results.

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Investigation Equipment: The Role of Chance

Dave Wood
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Much 'investigation equipment' is used routinely by researchers for no scientific reason. The anecdotal evidence presented for the relationship between anomalous equipment readings and anomalous sense experience does not account for the role of chance, or the role of the influence of such readings on participant reporting rates. Detractors argue that no study has disproven or supported any such links. This study examined 912 experiences over 2641 minutes, or thirteen events in ten locations over three years. No anomalous readings were found to be associated with anomalous sense experience. The role of chance in readings coinciding with experiences was discussed. Readings were found to have no impact upon reporting rates, but various limitations of the study were highlighted.

Introduction

So-called 'paranormal investigation equipment' is seemingly ubiquitous amongst 'paranormal researchers'. EMF meters, ion counters, ultrasonic and infrasound meters, thermometers of all varieties are all sold with the assertion that 'experts say ghosts cause [insert any variable] fluctuations so you need a [name of meter]'.

This journal has established previously that these hypotheses have no scientific grounding or even theoretical justification whatsoever (Wood, 2008). There is no scientific link between any of these units of equipment and apparent psi events. Peer-reviewed journals have reported the link between weak, complex magnetic fields (Braithwaite & Townsend, 2005, 2008) and hallucination, and infrasound to a less reliable degree (Parsons, 2008). However the aforementioned units of equipment are typically not used for these purposes and are certainly incapable of measuring relevant fluctuations (Townsend, 2007).

Despite the lack of any justification, the use of such equipment remains popular. Two major reasons have been advanced to justify their popularity: a) that there would appear to be some evidence to support the connection between environmental fluctuations and apparent anomalous experience, or b) the fact that relevant theories have not been adequately tested and disproven.

To this author's knowledge no research journal has ever published any convincing evidence – excluding the purely descriptive – to link environmental fluctuations with apparent psi experience. Evidence circulated via the Internet would seem to be anecdotal at best. Individual researchers report a unit of equipment 'going off' during 'impressive' psi events; this leads to the idea of there being 'something in' the link between the two. This evidence tends to be meaningless as it simply presents two events taking place at the same time, with no evidence to link the two together.

However, to the uncritical mind the role of cognitive bias and superstition is powerful. Poor probabilistic reasoning tends to play a role as an event is presented in isolation – e.g. an EMF meter 'goes off' at around the time some person 'feels a ghost' – no consideration is given to the probability that the two events taking place in a similar

time frame was purely coincidence. For example: a percipient reported ten events within a given hour period; an EMF meter makes some sort of 'anomalous' reading once every three hours. If a 'reading' is considered 'interesting', say, if it took place within twenty seconds of an experience the chance of this being coincidence might be, all things being equal, one in twenty-seven. This means that only twenty-seven hours of 'field time' would need to be 'clocked up' in order to be fairly sure such an 'impressive' and memorable event involving equipment readings would take place by pure fluke alone. As poor recording seems to be a common feature of many 'investigation' events – or 'readings' are often only recorded when 'compelling' – there is little chance of being able to assess the role of chance after the event.

This is, of course, a highly simplified calculation and does not take account for common problems such as: the user error of researchers not being trained to use equipment and therefore generating erroneous readings; or the influencing role a "ghost detector" 'going off' might have on experiencers in the area of it.

In strict scientific terms there is little value in testing a theory that has no justification: that is, in effect, nonsense. However it could be argued that where theories are so influential amongst lay researchers, that there is some value in testing them. For three years PSI engaged in a highly standardised methodology, seeking to test such hypotheses.

Hypothesis

H₁: It is predicted that any coinciding of anomalous equipment readings and ambiguous sense experience will not be greater than chance.

H₂: It is predicted that there will be no association between anomalous equipment readings and ambiguous sense experience.

The data will also be analysed to establish whether participants are more likely to report an ambiguous sense experience following an anomalous equipment reading. However, as this is purely explorative a hypothesis will not be stated or firm conclusions drawn.

Method

The results of thirteen fieldtrips across ten locations and over three years were included. A further eight fieldtrips were conducted within this overall standardised method, but problems with individual cases (considered without knowledge of specific results) led to their exclusion.

The common format for these fieldtrips were groups of participants numbering between eight and twelve being split into two groups and deployed across four areas each in every fieldtrip. These four sessions varied in length from thirty to forty-five minutes each. A stable group was used across all fieldtrips, with gradual changes in its composition over time. All fieldtrips followed the exact same reporting procedure: every participant recorded all 'unexpected' sense information into a voice recorder. Participants were also instructed to record any readings collected on a standard EMF meter, ion counter, ultrasonic meter, thermometer and data logger

(recording humidity and temperature). All events and readings were recorded regardless of individual participant interpretation of their cause.

The results of the fieldwork were examined for all instances of 'anomalous experience' by percipients, and for all atypical equipment readings both in isolation and where it took place at the same time as an 'experience'. Atypical readings were defined as any readings using EMF meters, ion counters or ultrasonic meters and an (arbitrary) three degree Celsius temperature and ten per cent humidity variation.

The method was devised to closely mimic a typical 'fieldwork' situation. Experiences and equipment fluctuations were recorded regardless of interpretation for a similar reason. Within an uncritical fieldwork environment any ambiguous sense data may be interpreted as 'paranormal' purely depending on the cognitive biases of the experimenter. Similarly any environmental fluctuations could be 'interesting' to the uncritical researcher.

Results

2641 minutes of 'fieldtime' were included in the study, over thirteen fieldtrips in ten locations. 912 units of ambiguous sense stimuli were recorded by participants over this period. The rates of reporting within each fieldtrip were moderately consistent between field trips at a rate of between 0.19 and 0.45 reports per minute.

Over this period a total of 50 equipment readings fulfilled the above criteria (see Table 1, below). Of these, 8 were 'linked' whilst 42 were 'independent'. This means that 8 of the readings occurred at the same time as an ambiguous stimuli report, and 42 did not coincide with any sense reporting.

Table 1 – Summary of Equipment Readings Across 13 Fieldtrips

Fieldtrip	EMF		Ion		Ultrasonic		Temp		Humidity		Total
	Ind.	Link	Ind.	Link	Ind.	Link	Ind.	Link	Ind.	Link	
WT	1		1						1	2	5
MP			1		1				2	1	5
BFS					1		3			1	5
WM			1				3	1			5
LC1											0
LC2			3				1				4
LC3	1									1	2
LH			3				3	1			7
OH	3		3				1				7
SFS			4				1		1		6
SF	1		1								2
TP					1		1				2
VH											0
Total	6	0	17	0	3	0	13	5	3	3	50

The data was also considered for whether the very fact of equipment readings being given would influence the reporting rate of participants. For these purposes only those units of equipment that give an obvious indication of a reading – i.e. EMF meter, ion counter and ultrasonic meter – were included. As a first step, the number of reports

per minute between the 'anomalous' reading and the next 'normal' reading were contrasted with the overall rate per minute of reports for that fieldtrip. Where the number of minutes is more than fifteen this is because each reading was anomalous over the period. This is shown in Table 2, below:

Table 2 – Summary of Reports Following Equipment Readings

Fieldtrip	Unit	Following the reading			Overall Reports/Min
		Reports	Minutes	Reports/Min	
WT	EMF	3	15	0.20	0.19
	Ion	1	6	0.17	
MP	Ultrasonic	5	17	0.29	0.29
	Ion	0	8	0.00	
BFS	Ultrasonic	5	43	0.12	0.28
WM	Ion	2	10	0.20	0.29
LC1	None				
LC2	Ion	19	22	0.86	0.54
LC3	EMF	13	30	0.43	0.48
LH	Ion	2	2	1.00	0.29
OH	EMF	4	33	0.12	0.23
	Ion	2	12	0.17	
	Ion	2	15	0.13	
SFS	Ion	9	38	0.24	0.29
SF	EMF*				
	Ion	5	19	0.26	0.28
TP	Ultrasonic*				
VH	None				
Total		72	270	0.27 Average	0.35 Average

*Represented final reading of session

The data in Table 2 is fairly consistent with a typical spread of data. Most of the average reports per minute (RpM) following an anomalous reading were similar to the overall reports per minute of the fieldtrip the segment came from. Further, as one would anticipate, there are a small number of extreme values, including: one period with no reports (MP – Ions), a twenty-two minute period with nineteen reports (LC2 – Ions) and a two-minute period with two reports (LH – Ions). Overall the RpM was very similar, though slightly less, when comparing the average following anomalous readings (0.27) and the overall average (0.35).

Discussion

Hypothesis (H₁) stated that any equipment readings that coincided with an experience report could be accounted for by chance. Discounting temperature and humidity readings, none of the remaining 26 equipment readings coincided with an experience report. However, when assuming that a 'link' between the two by an uncritical mind, might be made if an experience took place within twenty seconds of an anomalous reading, there could be a 1 in 4.12 likelihood of the event being down to chance alone. This is based on calculating forty second blocks around the nine hundred and twelve experiences: one in four of any randomly chosen time points would have

fallen within twenty seconds of an experience. As such around six reports (4.12 of the twenty six) would have expected to have coincided with an equipment reading. However, intervening variables may have accounted for the lack of coincidence. For example equipment readings were often taken in a regimented procedure of thorough baseline testing, rather than being used explanatorily or in an *ad hoc* way, possibly making reporting of ambiguous sense experience less likely.

Temperature and humidity were excluded from these calculations, even though eight coincidences took place, as the analysis for these differed slightly. These measurements were taken between 'baseline' intervals, and links were where a drop in temperature was actually perceived. These are, therefore, more likely to account for actual felt temperature fluctuations.

Hypothesis (H₂) stated that there will be no link between anomalous equipment readings and ambiguous sense experience. The fact that in 912 sense experiences there were no EMF, ion meter or ultrasonic meter readings that coincided tends to support this hypothesis. Similarly, the lack of increase in ambiguous sense experience following readings seems to add additional weight to this hypothesis.

Further, no link was apparent between equipment readings and resulting reporting rates. However as the participants used were trained in both equipment use and critical thinking, this may not be ecologically valid.

Limitations

This study has a number of severely limiting factors. A relatively low number of equipment readings were gathered, making any conclusions based on these figures difficult. The individual circumstances surrounding the study – the people involved, operator training in equipment use and the locations involved – makes generalisation of any specific statistical findings almost impossible. However the method and demonstration of assessing the role of chance remains more useful.

Future Research

As well as dealing with larger numbers, future research may benefit from greater ecological validity. If untrained individuals were participants in such a study the number of erroneous readings, and hence the ability to compare results with that of chance, may be greater.

Implications

Whilst specific findings are difficult to generalise, the broader findings of the study have implications for paranormal investigators and their clients. The study demonstrates that even with trained and critical participants, a to a greater or lesser degree 'impressive' coincidence of experience and equipment reading is to be expected, by chance, once in every two or three investigation events. And where users are more likely to be influenced by obvious readings and are less well trained – or equipment is used that is more prone to error, such as the K2 EMF meter – the chances of such coincidences may become greater.

As mentioned previously there is no scientific justification for the use of such equipment, but this study does help to model the extreme caution that should be applied to any 'evidence' gathered using such equipment.

This study also underlines the idea that if 912 anomalous sense experiences can be had without any demonstrable link between them and such units of equipment, that the prospects for gathering any meaningful, non-anecdotal, evidence using such methods are bleak.

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Non-Random Output of a Random Number Generator During an Apparent Poltergeist/RSPK Experience: A Case Study

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Introduction

Psychokinesis (PK) is the hypothesized ability of the mind to influence physical objects and processes. It is commonly referred to as mind-over-matter. PK can be divided into two categories depending on the size of effect. Micro-PK involves effects that occur on a very small scale down to the microscopic and/or atomic level where results are observed with the aid of computers, statistical analysis, and other advanced equipment. Macro-PK occurs on a large scale and includes such things as: psychic healing and psychic surgery; materialization and dematerialization of objects; teleportation; the imprinting of images on film or video; and the imprinting of sounds and voices on tapes or other recording devices (1).

Poltergeist activity, which was more appropriately termed by William Roll as Recurrent Spontaneous Psychokinesis (RSPK), is thought to be a form of PK that is centered around and produced by a living person called the agent (4,5). The agent that activity is centered around is sometimes under stress and the RSPK is the result of the subconscious mind releasing the stress via PK (1-5). Despite the reported macro-PK events reported during poltergeist outbreaks, the agents are not generally able to produce PK effects when tested in the laboratory (5,6).

Despite the lack of results with RSPK agents in the laboratory, there is considerable data concerning other PK studies and laboratory data. PK studies utilizing Random Number Generators (RNGs) / Random Event Generators (REGs) are numerous and have provided promising results (7-13).

RNGs are analogous to electronic coin tosses. However, instead of randomly producing heads or tails, the RNG produces a random binary output of a 1 or 0. The 1 or 0 is representative of a random quantum event inside the device (radioactive decay, photons traveling through a semi-transparent mirror or electronic circuit noise) and the extrapolation of quantum tunneling into a binary output.

To further assure there is no bias in the output of the RNG, the logical operation XOR (Exclusive-OR) process is used on the raw binary output. This process gives a TRUE when only one of the operands is TRUE and returns a FALSE when both operands are either TRUE or FALSE. An example is given below:

Original raw data	10	11	00	10	01	00
XOR output	1	0	0	1	1	0

Random output during control conditions are expected and observed in various experiments. So, how would it be possible to influence the output of the RNG via PK?

The actual mechanism is not known, but many theories have been put forward. These include: observational theories which involve some aspects of quantum theory (23-24); Model of Pragmatic Information (25); Memory Model (26); Psi-Mediated Instrumental Response (27); Synchronicity (28); Conformance Theory (29); and Decision Augmentation Theory (30). More information on these theories and models can be found in the provided references. They will not be covered here since reviewing proposed theories is outside the scope of this paper. It is mainly a case study, and there is currently no consensus on the proposed mechanism for how PK can affect a RNG.

Despite the lack of an agreed upon theory and mechanism to explain how PK can affect RNGs, proof-oriented research has provided interesting data. The studies showed that control data was in line with chance expectation when there was no intention on behalf of the subjects to influence the RNGs. However, there was significant non-randomness during periods of intent to influence the RNGs. It has been shown that groups of humans can influence the output of RNGs during meditation, meetings, ceremonies, sporting events and tragedies (10,13-18). Also, RNGs can be affected by individuals and pairs of people (7-8).

In addition, studies with RNGs where groups exerted no conscious intention toward the RNG still resulted in RNG output that deviated significantly from chance (15,18-19). This indicated that something besides conscious intention could affect RNG output. This led Blasband to hypothesize, "...we reasoned that if other-than-conscious intentions can order the output of an REG, then it was possible that spontaneous, undirected, emotional expression might, in some way, do the same." Their study on the subject brought forth the following conclusion, "Our results demonstrate that the release of intense emotions in a therapeutic situation is correlated with the anomalous output of a proximate random event generator" (20).

Since it has been hypothesized that RSPK is the result of the subconscious mind releasing stress via PK (1-5), and studies have shown that factors other than conscious attention can affect the output of RNGs (15,18-20); then running an RNG during an investigation of RSPK would seem prudent. This in fact was the case, and there have been reports of RNGs producing significant deviations from chance when left in the general area of poltergeist outbreaks (21-22).

Gerding et al placed RNGs in a location of poltergeist events (21) and they also tested the RNG-PK effects of various family members involved in the situation. Testing of the family members was done in the same location that the reported poltergeist events were said to occur. The following quotes from the Gerding et al study (21) were of interest:

"Although the results of the field RNG and PK tests show some evidence for RNG-PK and seem to correspond to our hopefully prudent conclusion, we must be sure not to forget that these results are still marginal and exploratory."

"The results showed there to be a marginally significant decrease in deviations from chance ($p < 0.05$ two-tailed)... Additionally the RNG-PK runs showed some evidence for RNG-PK from the two adolescents in the family but not to such a degree as might be

expected in a poltergeist agent." Both positive and negative deviations were noted with the family members.

"Accordingly, we present these results as exploratory ones and conclude only that this application of the field-RNG is certainly worthwhile to follow up in future Poltergeist cases."

Based on this recommendation and reasoning, it was decided to place a RNG in a location where RSPK experiences were happening and have the subject (the possible RSPK agent) attempt to consciously influence the device, as well as run the device when there was no conscious attempt to influence the RNG.

Methods

A Psyleron RNG (Psyleron REG-1; www.psyleron.com) was placed in the residence where RSPK experiences were reported. It was set up according to the specifications provided in the instruction manual. It ran at a rate of 200 bits per second. The provided FieldREG software was used to collect, graph and export the data.

The suspected RSPK agent was asked to consciously attempt to alter the output of the REG for approximately 10 minutes. The subject then went about their 'normal business' and did not consciously focus on the RNG. Data continued to be collected until shortly after a RSPK experience was reported. A RSPK experience would include one or more of the previously reported phenomena: banging/pounding sounds on the walls; scratching sounds in the walls; voices; a gray to black form moving down the hallway area; a phone cord moving; and seeing the apparition of her still living younger son.

The cumulative deviation (deviation from what would be expected if there was no effect on the RNG) was graphed. Each REG data point was converted to a z-score using the formula $z=(x-100)/\sqrt{50}$ (the z-score is a standard score that indicates how many deviations a data point is above or below the mean). A Stouffer Z (Z) was calculated for the periods of conscious intent and no conscious intent using the formula $Z=\sum zi/\sqrt{N}$ (the Stouffer Z is the combined z-scores that represent the composite deviation from the mean). A two-tailed p-value was determined for each Z (the p-value is the probability of obtaining a result at least as big as the one observed when there really is no difference between the control and test conditions). The significance level alpha was set to 0.05 (the significance level is the threshold for determining if a p-value is significant). Therefore, if the p-value obtained is equal to or less than 0.05 the result will be deemed statistically significant.

Results

The suspected RSPK agent was a 38-year-old female who lived alone at the time of the investigation. She reported a considerable amount of stress in her life due to work, personal relationships and family. She reported having the following experiences on and off over the last two to three years: banging/pounding sounds on the walls; scratching sounds in the walls; voices; a gray to black form that moved down the hallway area; witnessed a phone cord move across the couch at the same time she heard a growling sound; and seeing the apparition of her still living younger son move from the kitchen to his bedroom. A prior investigation included monitoring the following environmental factors: electromagnetic fields, natural magnetic fields, radiation,

temperature, humidity, dew point, light intensity, and positive and negative ions. No anomalies of any significance were found in that data, nor were there any anomalous experiences during that investigation. The subject was very emotional and unstable at the time this study was conducted.

Segment A in figure 1 shows the RNG cumulative deviation when the subject attempted to consciously influence the RNG. The Z value was 1.17 and not statistically significant ($p=0.242$; two-tailed).

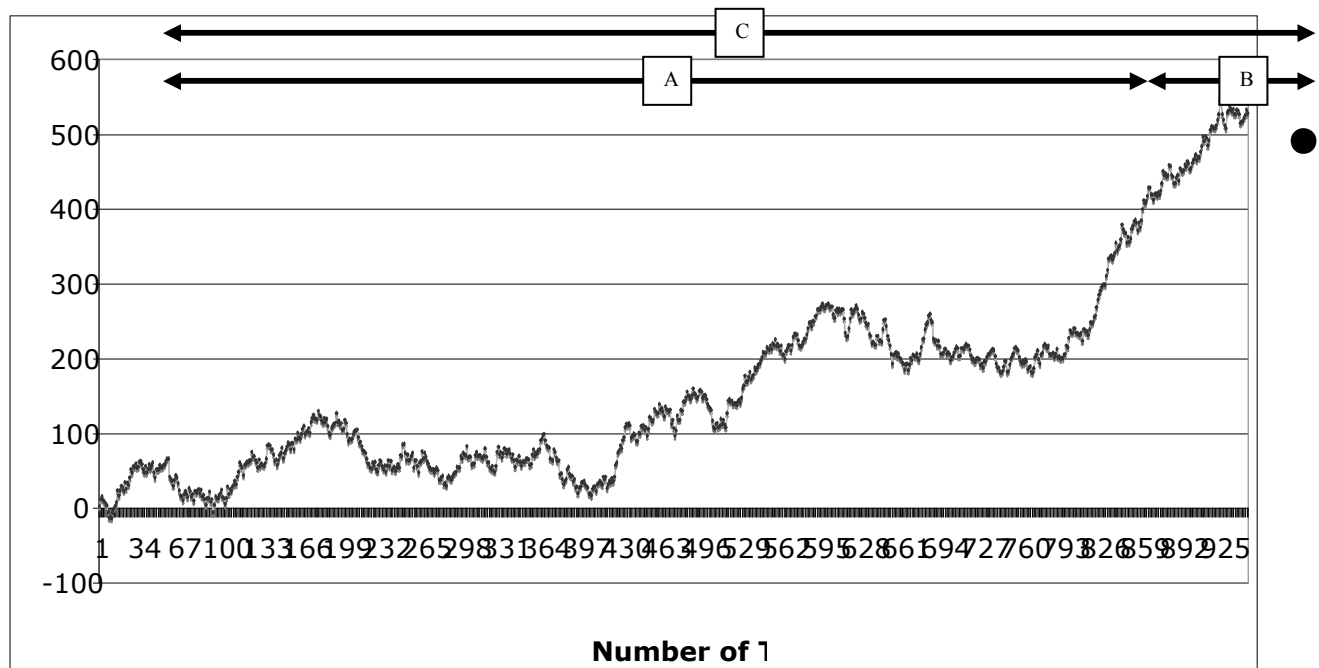


Figure 1. Segment A: Conscious intent, $Z=1.17$ ($p=0.242$; two-tailed; not significant). Segment B: No conscious intent, $Z=3.49$ ($p=0.0005$; two-tailed; significant). Segment C: Conscious intent + no conscious intent, $Z=2.42$ ($p=0.016$; two-tailed; significant). Black dot: When loud thud/bang was heard on inside wall between living room and kitchen.

After about 10 minutes of the subject attempting to consciously influence the RNG, she stated that things didn't usually happen when she was consciously trying to make them happen. It seemed to happen more when she was occupied with other activities. This was an interesting observation on the part of the subject since it has been hypothesized that RSPK is the result of the subconscious mind releasing the stress via PK (1-5), and studies have shown that factors other than conscious attention can affect the output of RNGs (15,18-20).

The subject then went about doing normal routine activities and did not consciously attempt to influence the RNG. Approximately two and a half minutes later there was a loud thud/bang on the inside wall between the living room and the kitchen. Segment B in figure 1 shows the RNG cumulative deviation for that two and a half minute time period. For segment B in figure 1 the Z value was 3.49 ($p=0.005$; two-tailed) and was statistically significant. The black dot in figure 1 was when the loud thud/bang was heard. The cumulative deviation reached its highest point during this time and the Z value was 2.97 ($p=0.003$; two-tailed), which was statistically significant.

Discussion

These results are consistent with other studies where a RNG was placed in a location with RSPK experiences in that there was a significant deviation from randomness during periods of RSPK experiences (21-22). In addition, it was similar to what was found in respect to the conscious intention of potential RSPK agents to influence the RNG. Gerding et al have stated, "...the RNG-PK runs showed some evidence for RNG-PK from the two adolescents in the family but not to such a degree as might be expected in a poltergeist agent"(21).

These results could support the idea that the RSPK agent was able to subconsciously affect the output of the RNG at the same time the anomalous thud/bang was heard. This would lend support to the hypothesis that RSPK experiences are due to the subconscious release of stress via PK and other factors besides conscious intent could influence the output of a RNG (1-5,18-20).

Alternative interpretations for consideration are as follows.

Firstly, it was seen in segment A in figure 1 that there was an upward trend during the latter half of the conscious intent period. This trend may have achieved statistical significance if the subject would have continued to consciously influence the RNG. The combined data from both situations (the conscious and no conscious intent time periods) resulted in a statistically significant Z value of 2.42 ($p=0.016$; two-tailed). This is shown in segment C in figure 1. Though consciously directed PK attempts by RSPK agents have been shown to be rare, it has happened (5-6).

Second, the emotional state of the subject could have influenced the RNG and there was no RSPK influence at all. This would support a prior study in regards to RNGs and emotional states (20). Further experiments running the RNG should be done during periods of differing emotional intensity when no RSPK experiences are reported in order to determine if deviations from randomness occur without suspected RSPK influence.

Third, the random output of the Psyleron RNG has been tested and proven over long runs. However, shorter runs may give different results.

Fourth, this was a small and short study and it is possible that the significant result found could have been a Type-I error. Further studies are needed with more subjects and/or longer periods of data collection.

Fifth, it has been shown that groups of humans can influence the output of RNGs during meditation, meetings, ceremonies, sporting events and tragedies (10,13-18) and RNGs can be affected by individuals and pairs of people when used to study mind-matter interactions (7-8). The influence on the output of the RNGs has even been shown to be independent of conscious intent (15,18-19). It is therefore possible the experimenter played a role in influencing the results regardless of if he was attempting to consciously influence the RNG output or not. Not having the experimenter present during data collection would have been beneficial in determining if this affected the results, and a further study where the experimenter is not present is recommended. Alternatively, the experimenter could be blinded to when the influence period is and is not being done. It should be noted that the experimenter did not see the output of the RNG during the data collection period as the 'show the display/show feedback' function on the software program was turned off.

Conclusion

The results in this study showed a statistically significant deviation from randomness in RNG output that coincided with a period of time in which a loud bang took place (a suspected RSPK experience) and while the subject was not attempting to consciously influence the device. This would support prior studies (21-22). Further studies are needed due to the alternative interpretations presented in the paper.

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Expectation and the use of Séances during Field Investigations

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The widely discredited practices of séances have passed into standard practice in twenty-first century paranormal field investigation. Reports made during séances are often thought to be the result of expectation and misattribution. This paper considers whether ambiguous stimuli reports are heightened during séance and calling out sessions, compared with field observation. 4908 minutes of fieldtime over twenty fieldtrips and three years were considered. It was found participants were almost twice as likely to report ambiguous sense experience during séance and calling out sessions. Likely conclusions and implications for the activity during field investigation were discussed.

Introduction

Séances as a method to contact the dead gained popularity during the early Victorian period, whilst spiritualism as a movement gained followers. There is, however, evidence of earlier attempted communication with the dead (e.g. Lytton & Montague, 1760). Traditional séances tend to comprise a group of 'sitters' around a table with a medium, with the lights turned off. Activities that took place in séances included alleged levitation, production of ectoplasm, the medium entering trances and passing on the messages of dead relatives to sitters (Wiseman, 2003). Much of the mediumship involved, particularly physical mediumship and including that of the Fox Sisters who partly originated the popularity of the séance, was either shown to be fraudulent or those concerned confessed to hoaxing. Over the decades séances have been widely discredited by these measures and by researchers demonstrating sitters' ability to self-deceive (e.g. Wiseman, 2003), the medium's ability to trick (e.g. Keene, 1997) and, more controversially, the alleged ability of sitters to create physical effects through the concentration of the mind (Owen & Sparrow, 1976).

Séances continue to be practised today by spiritualists, informal groups and psychic investigators. Settings for séances range from spiritualist training courses, adolescent bedrooms and reality television programmes. This latter setting, perhaps, is responsible for the adoption of the séance into 'paranormal investigation' settings, often without a medium. In such settings the focus is on use of Ouija boards (or similar), calling out for sounds and has, itself, been subject to some allegations of fraudulence behaviour (Donni, 2008).

Between the Victorian traditions, spiritualist practices and media demonstrations, the concepts of 'séances' and 'calling out' are now culturally loaded with associations of 'spirit contact'. The use of séances and calling out in paranormal field investigations raises several methodological questions.

One flaw with the activity is the lack of proposed mechanism to explain how or why such 'contact' might result from séances and calling out. The activity is largely assumption-led: it is based on the assumption that spirits exist and are able to 'make contact'. As such, xenonormal (normal but unfamiliar) events are more likely to be misattributed as attempted spirit contact. In line with the 'new house effect' setting

(Wood & Gould, 2007) theory, sitters are also more likely to attend to information in a novel environment, or even a familiar environment viewed in a novel way such as a séance.

The psychological expectation, and possibly the level of arousal (Wiseman, 2003), associated with such loaded situations may well account for a heightened experience of xenonormal sense stimuli.

This paper examines séance and calling out sessions across twenty field investigations to establish whether such circumstances make participants more likely to report ambiguous sense stimuli compared to normal field observation.

Hypotheses

H₁: It is predicted that participants will report more ambiguous sense experiences during a séance setting than during a non-séance setting.

H₂: It is predicted that participants will report more ambiguous sense experiences during a calling out setting than during a non-calling out setting.

Method

The results of twenty fieldtrips across fourteen locations and over three years were included. A further fieldtrip was conducted within this overall standardised method, but problems with the individual case (considered without knowledge of the results of the procedure) led to its exclusion.

The common format for these fieldtrips were groups of participants, numbering between eight and twelve, being split into two groups and deployed across four areas each in each fieldtrip. These four sessions varied in length from thirty to forty-five minutes each. A stable group was used across all fieldtrips, with gradual changes in its composition over time. All fieldtrips followed the exact same reporting procedure: every participant recorded all 'unexpected' sense information, regardless of individual interpretation, into a voice recorder. This included information participants could find a possible but not definite explanation for; e.g. if a participant dropped a pen the cause of the sound would be definitely identifiable and hence not recorded, whereas if a participant heard knocking from another floor with a compelling possible explanation the event would be recorded. Participants were also required to conduct one 'calling out' session during each investigation session. Between two groups and four sessions, eight calling out sessions were conducted at most events. Participants were asked to continue to report ambiguous sense experiences as normal during calling out. Before the commencement of sessions at any fieldtrip – and at the end of four sessions – participants engaged in a 'séance' as one group. Séances did not use mediums and were run as extended calling out sessions. The séances lasted between ten and thirty minutes each. Participants were asked to continue to report ambiguous sense experiences as normal during séances.

Results

4908 minutes of 'fieldtime' was included in the study, over twenty fieldtrips in fourteen locations. An overall 1328 ambiguous sense stimuli reports were made over this fieldtime. 571 minutes of séance time was recorded, over which period 294 units of ambiguous sense stimuli were reported by participants and recorded. Over the same fieldtrips 140 minutes of calling out – or seventy calling out sessions – were recorded. Over this period 67 units of ambiguous sense stimuli were recorded by participants

The breakdown of reports per minute during séances and non-séance periods are listed below, in table 1.

Table 1 – Summary of Séance and Non-Séance Reporting

Fieldtrip Code	Investigation Reports per Min	Séance Reports per Min	Non-Séance Reports per Mins
WT1	0.2	0.39	0.17
MP	0.25	0.83	0.14
BFS	0.25	0.46	0.22
PC	0.27	0.2	0.29
WC1	0.29	0.58	0.26
LC1	0.19	0.15	0.2
LC2	0.57	0.85	0.52
LC3	0.45	0	0.49
LH	0.23	0.32	0.22
WT2	0.19	0.42	0.17
OH	0.21	0.62	0.25
SFS1	0.3	0.62	0.25
SF1	0.24	0.27	0.24
TP	0.33	0.38	0.32
SF2	0.31	1.07	0.23
VH	0.32	0.57	0.29
SFS2	0.25	1	0.14
Mean	0.29	0.51	0.26

The number of reports overall during investigations ranged from 0.19 per minute to 0.57 per minute, with the mean being 0.29. The number of reports per minute during séances ranged from 0 to 1, with 0.51 being the mean. The number of non-séance reports per minute ranged from 0.14 to 0.52, with 0.26 being the mean.

The breakdown of reports per minute during calling out sessions and non-calling out periods are listed below, in table 2.

Table 2 – Summary of Calling Out and Non-Calling Out Reporting

Fieldtrip Code	Investigation Reports per Min	Calling Out Reports per Min	Non-Calling Out Reports per Mins
MP	0.25	0.1	0.25
BFS	0.25	0.33	0.25
WC1	0.29	0.79	0.27
LC2	0.57	0.75	0.56
LC3	0.45	1	0.43
WC2	0.23	0.5	0.22
WC3	0.19	0.5	0.18
LH	0.23	0.58	0.21
OH	0.21	1	0.16
SFS1	0.3	0.67	0.29
SF1	0.24	0.1	0.25
TP	0.33	0.42	0.33
SF2	0.31	0.5	0.3
VH	0.32	0.25	0.32
SFS2	0.25	0.38	0.24
Mean	0.29	0.52	0.28

The number of reports per minute during calling out ranged from 0.1 to 1, with 0.52 being the mean. The number of non-séance reports per minute ranged from 0.16 to 0.56, with 0.28 being the mean.

Discussion

Overall participants were nearly twice as likely to report during séances (0.51 to 0.26) and were similarly nearly twice as likely to report during calling out (0.52 to 0.28). These figures are in support of both H_1 and H_2 . The overall figures are also strikingly similar between séances and calling out; although it should be noted that whilst taking place at different points in the fieldwork procedure, the two are operationally very similar.

There is little doubt that, at least for this group of participants, being in a séance or calling out environment consistently leads to a greater propensity for reporting ambiguous sense stimuli. It is impossible to conclude the precise reason why this might be the case, and there are various competing theories.

The conclusion with the fewest assumptions is that the role of expectation would lead to participants attending to more ambiguous sense stimuli. In other words the mere fact of being in a séance or calling out environment means participants are more likely to attend to their environment. The context of expecting 'contact' in these culturally loaded environments means that participants are more likely to notice ambiguous stimuli and attribute a possible paranormal explanation.

Competing explanations might include the role experience and arousal. Participants might report more ambiguous stimuli at a séance session at the start of a field investigation due to not having experience of what they would 'expect' to report,

and thus may be more aroused. However as calling out sessions took place at hourly intervals across all field investigations and led to a similar rate of ambiguous sense experience reporting, this is less likely to be a factor. However the possibility should be noted that such 'calling out sessions' may lead to more reports because they reinvigorate participants that are otherwise engaged in a mundane activity and hence lead to greater concentration.

Another alternative explanation might be that possible psi events are more likely to take place during séance and calling out contexts. However as an assumption-led explanation without any supporting mechanism, this explanation is less likely than the psychological explanation of expectation.

Limitations

Any generalisation of results should be treated with caution, due to the low number of participants involved. Similarly, reliance on an established mean between up to twenty different fieldtrips at different locations should be treated with due caution as the comparability between fieldtrips has to be assumed.

The study would have benefitted from further statistical work comparing the 'séance' and 'calling out' periods with similar equal time periods rather than relying on comparison of a mean across different time periods. However as the time intervals took place at different times across different fieldtrips, and because the figures should be treated cautiously in any event, it was felt this level of statistical analysis was not a good use of resources.

Future Research

Further treatment of the same data may benefit from examining the nature of reported ambiguous sense stimuli. Are the types of stimuli reported similar to that of field observation setting? This may help to establish whether séance and calling out sessions simply produce exaggerated levels of reporting, or whether the cultural connotations of the activities help to guide the perceptions themselves.

Possibly the greatest scope for drawing more meaningful conclusions from such settings might be to create a more controlled experimental environment. If the nature of ambiguous sense experiences could be objectively established, individual perceptions of these could be more meaningfully studied.

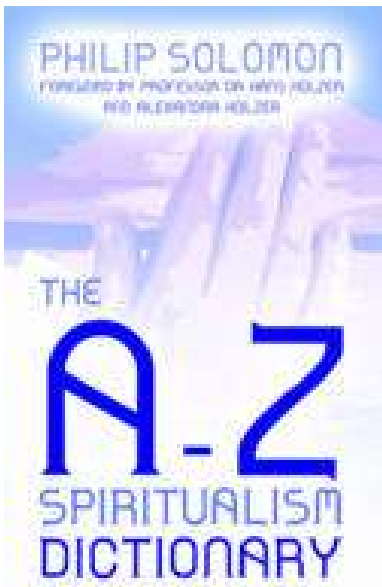
Implications and Conclusion

It would be reasonable to conclude that inclusion of séances and calling out in field investigations result in more xenonormal reporting. From a rational perspective of trying to get to the bottom of xenonormal experiences, introducing such new variables is probably not useful. Also, as séances and calling out are assumption-led approaches, their employment lays risk to drawing assumption-led conclusions. Such conclusions might cause harm to a client and, as such, the use of séances and calling out during field investigations is probably not justifiable from a scientific and ethical perspective.

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Book Review: The A-Z Spiritualism Dictionary



By Trystan Swale

The A-Z Spiritualism Dictionary. Soloman, P., 2009. Apex Publishing. pp.150. ISBN: 978-1906358525

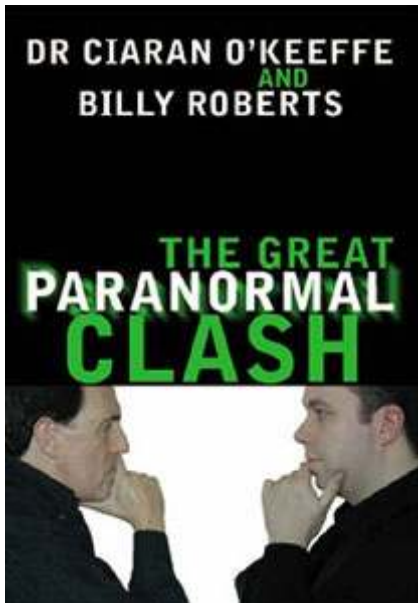
The past thirty years have seen a dearth of widely available Spiritualist reference works. Philip Solomon's *The A-Z Spiritualism Dictionary* is an attempt to address this situation, his introduction presenting the book as a tool for the curious and those who may not fully grasp some of the specific terms used by followers of the religion.

The worth of any specialist dictionary is the quality of the definitions it offers and here they vary in strength. When concentrating solely on Spiritualist practice Solomon produces a succession of insightful entries. Methods of healing and obscure pieces of channelling equipment (such as the additor, a talking board with attached hollow box in which 'psychic power' would build up) mingle with brief biographies of well known mediums, various Spiritualist organisations and their high ranking officers. Specific practices such as flower clairsentience and circle development are outlined, albeit alongside more unexpected terms such as crop circles and the chupacabras 'goat sucker' monster.

It is with these definitions on the fringes of Spiritualism where Solomon occasionally falls short. For example, sceptics are considered to be 'people who totally refute anything', a flawed definition which is doubly erroneous in that scepticism involves the process of following – and thereby placing reliance upon – the best available evidence. A possible link between mediumship and schizophrenia is also described as 'nonsense', not due to a lack of evidence but because the author states 'trance in mediumship is always under some kind of control at all times'. Whether unintentional or otherwise, the implication is made that schizophrenics are incapable of controlling such a situation. Finally, an entry on ley lines also reveals an error, suggesting a linkage to dowsing on behalf of their discoverer, Alfred Watkins. In fact, Watkins' view was that leys represented the routes travelled by ancient traders. Unfortunately, such examples of questionable definitions are not the only ones to be found within the text and one wonders whether the overall product would have been better without them: Solomon's strength is writing about Spiritualism, not cryptozoology, earth mysteries and philosophical ideologies.

Criticisms aside, Spiritualists may find this book a valuable addition to their personal library, offering insight into the largely unpublicised corners of its practices. For those on the outside of the religion, the strength of the core material is enough to merit a cautious examination of *The A-Z Spiritualism Dictionary*.

Book Review: The Great Paranormal Clash



By Trystan Swale

The Great Paranormal Clash. O'Keefe, C. and Roberts, B., 2008. Apex Publishing. pp.150. ISBN: 978-1906358143

Billed within its blurb as 'a tense dialogue between two different sides of the paranormal debate', *The Great Paranormal Clash* is a mass published hardback presenting the contrasting beliefs, motivations, opinions and understandings of both a parapsychology academic and a stage psychic. Dr Ciaran O'Keefe and Billy Roberts are both well known figures in their own right; the former from his television appearances on Living TV, Roberts a stage clairvoyant and psychic.

Following an inspirational foreword from broadcaster Jane Goldman, the true nature of the 'dialogue' between the authors is revealed in the subsequent chapters. In each, the authors both produce their own particular viewpoint on a particular paranormal related subject. Following an exchange of manuscripts the authors then raise points of contention or discussion raised from the other's work. These take place in the form of questions and answers sessions.

Chapter one, 'The Parapsychologist and the Clairvoyant' outlines the social, employment and academic backgrounds of the authors. Roberts briefly recalls his experiences as a mediumistically inclined child, leading to an explanation as to how he is able to begin 'tuning-in' to the spirit world. O'Keefe's contribution is a striking contrast; we learn how critical thinking and a commitment to the scientific method have shaped his career path in all areas of psychology.

Chapter two, 'Defining the Paranormal' offers complementary outlines of some terms frequently used by both mediums and parapsychologists, including psychometry (gleaning information from an object without the assistance of the five recognised senses) and clairaudience (hearing spirit voices and other super-sensual sounds).

Chapter three, 'Mediumship and Communicating With Spirit' explores the world of the medium in greater depth. For the first time we see Roberts on the defensive, claiming that whilst sceptics can account for fraudulent mediums through accusations of cold reading (at its most basic, throwing out vague pieces of information which could be viewed as accurate by a considerable percentage of people), they cannot account for more detailed readings. By contrast, O'Keefe is still waiting for such accurate readings to be made in controlled conditions. His contribution also explores the range of techniques and rhetorical ploys utilised by mediums during sessions.

Chapter four is the first of the question and answer sessions. O'Keefe quizzes Roberts over the inconsistency of mediumship and of the means by which a supposedly genuine medium could spot a fraud. Roberts responds with a selection of

questions which appear largely irreverent (for example, the relationship between the Catholic church and the Spiritualist movement), although a good query concerns the pros and cons of utilising the polygraph 'lie-detector' when testing mediums.

Chapter five, 'Ghosts and Things That Go Bump In the Night' explores a range of haunting phenomena. O'Keefe outlines the poltergeist phenomenon and presents a very short overview of the scientific theories which may explain why some people believe they have seen a ghost. The ubiquitous photographic 'orb' is also scrutinised, although the overall explanation offered is inadequate in light of current knowledge on the subject. Roberts neglects medical understanding to explain corner of the eye apparitions as 'psychic' in nature. He also delivers an inaccurate assessment of the 'majority' of hauntings as being geomagnetically triggered hallucinations.

Within chapter six, 'Perceptions of the Spirit World', Roberts outlines his view of life after death. He envisages a world as physically real as our own, albeit one with periods of day and night. O'Keefe is knowledgeable enough to understand that views such as Roberts' are based solely upon the disputed messages of 'religion, Spirit and the perception of mediums'. Almost invariably such views vary from individual medium to individual medium and from religion to religion. The parapsychologist considers this reasonable enough ground to express his confusion.

From the onset of chapter seven, 'The Truth About Mediums?' O'Keefe continues to delve into the practices of the medium, exposing the myth of psychics being of more use than chance to criminal investigations. From here O'Keefe examines the strategies of the stage medium; the use of dramatic imagery, careful intonation, co-operative interaction and feigned modesty. Roberts' contribution is unexpected, suggesting that mediumship is an unreliable skill at best. To support his claim, Roberts offers a personal anecdote of an occasion on which the late Doris Stokes utilised underhand trickery when, it would seem, her mediumistic powers had deserted her.

Chapter eight is the second questions and answers feature. The most notable highlight is O'Keefe pulling Roberts up on his paranormal explanation for corner of the eye phenomena in chapter five.

A range of 'Divination Methods' are explored in chapter nine, those which allegedly able the user to obtain knowledge from otherwise hidden sources. Ouija boards, scrying and astrology are all examined in detail. Both parapsychologist and clairvoyant stress caution when employing any of these methods, although for different reasons. Roberts suggests all may have some weight when it comes to gleaning knowledge whilst O'Keefe examines the psychology, statistics and myths which underpin such superstitions.

Chapter ten is short, focussing exclusively upon meditation. Roberts and O'Keefe recite their personal experiences of the process and whilst both have positive recollections, disagreement arises as to whether meditation can help the participant achieve 'higher' states of consciousness.

'Superstition', chapter eleven, sees Roberts mulling over the various superstitious traits which affect the daily lives of many individuals. From the fear of the number thirteen to lucky socks, Roberts considers superstition as a breeding ground for psychologically damaging fear. O'Keefe is more concerned with superstition attached to

luck, outlining a short series of studies and activities which show that mathematical probability is a greater factor in our lives than we may think.

A rare moment of philosophical unity can be found in chapter twelve, on the issue of 'Spiritual Healing'. Both authors question its merits, O'Keefe examining the placebo effect and Roberts suggesting a forthright issue of self delusion. Chapter thirteen is the final question and answers segment. Roberts questions the parapsychologist as to how he would respond if one of his children proclaimed their psychic abilities. The path of life as a pre-determined set of events is also discussed.

In their final thoughts Roberts yearns for a return to the 'good old days' of mediumship. He further taps a vein of concern raised in chapter seven, suggesting commercial interest has led the field to become rife with deceptive practices. O'Keefe closes with consideration of what constitutes true wonder and magic: superstition, the supernatural or awe-inspiring natural scenery.

Such closing words are apt for a book which casts significant doubt upon the role of the numerous mediums and psychic practitioners in contemporary society. One criticism is that O'Keefe could have been more robust in his approach to Roberts. For example, Roberts never hides the get out clause offered by so many mediums who fail under laboratory conditions: the excuse of their power being unreliable. O'Keefe fails to adequately ask what we can do, other than take his word, to believe that Roberts is different to the fake mediums. Additionally, O'Keefe fails to pounce upon Roberts' assertion that superstition is potentially damaging to the individual. The critical thinker must ask what differentiates mediumship from other superstitions which involve faith based acceptance.

Despite these limitations the authors have compiled a well written, respectful tome offering a balanced overview from two different sides of a fence called belief. A mass market hardback is not the place to find new insight into paranormal research, yet as a general overview to the wider paranormal debate, O'Keefe's critical thought and Roberts' openness make *The Great Paranormal Clash* stand out from similar books.

Report of an Investigation into Stanton Park Farmhouse, Nov 08 to Jan 09

By Bakewell, S., Gasson, L., Gould, M., Haskins, R., O'Halloran, C., Sewell, N., Sherwood, S., Swale, T., Wills, S. & Wood, D.

1.0 Introduction

'Ghosts' or 'spirits' as manifestations of the survival of human consciousness has been a near ubiquitous feature of human civilization across culture and time. In times before mass rationality, 'ghosts' were considered to be undeniable, paranormal entities driven by belief in either religion or folklore. The age of rationality has discounted reported paranormal events as the consequence of hoax or over-active imagination.

As reports of ghosts and hauntings continue to be common in the 21st century large numbers of people have made various attempts to explain or investigate the nature of hauntings. People have attempted to devise classification systems for 'ghosts', for example as 'sentient spirits', 'replay ghosts' and 'poltergeist'. These categories tend to stem from folklore and have no scientific basis, merely the human mind attempting to make sense of unexplained data. Former categories, such as 'crisis apparitions' and 'veridical apparitions' have waned in recent times. The religion of 'spiritualism' grew in the nineteenth century; believing in the existence of God, an afterlife and ability of mediums to communicate with the spirits of the deceased.

Using objective methods to assess haunting claims has been popular since at least the late Victorian period. The last ten years has seen the TV-inspired proliferation of 'paranormal investigators', falling into several often indistinguishable methods:

- Religious experience. Mediums and psychics operate outside the scientific method, investigating under the assumption that God and the afterlife exists, and that they are equipped to contact them. As is the nature of religious experience, such methods cannot provide objective evidence, just personal proof for those who believe.
- Hobbyism and thrill seeking. Various hobbyist 'investigator groups' and commercial companies have formed in recent years so cater for groups wishing to 'experience ghosts'. Such groups pre-suppose the existence of ghosts and enjoy the experience of misattribution to contribute to a 'night out'. Again, such pursuits offer personal experience and personal 'proof', but make no contribution to scientific understanding of the subject.
- Pseudo-science investigators. Portions of 'paranormal investigators' attempt to investigate ghosts in a 'scientific way'. This usually follows the 'fishing' approach of assuming a building is 'haunted' and using 'ghost detectors' to attempt to prove this. The typical approach is attempting to capture EMF readings, ghost photographs, EVP recordings and the like. This assumption-led approach has no grounding in science, and in fact such methods have been proven to severely flawed. Over time some pseudo-science investigators have progressed to attempting to 'disprove' ghosts, but based on the unscientific false duality of assuming an experience is paranormal unless

proven to be normal. Pseudo-science investigators often consider themselves to be scientific, but fail to adhere to basic scientific principles and have been shown to have contributed little to scientific knowledge of the hauntings.

The Purpose of Rational Investigation

If most enquiries fall into the categories of personal and religious experience for personal proof or assumption-led pseudo-science, what is left?

What is clear is that people have experiences they attribute to possible paranormal phenomena. Such 'hauntings' often arise as a result of misattribution of xenonormal (normal but unidentified) phenomena. Rather than assuming these events constitute a haunting and using unproven tools to unscientifically draw conclusions, rationality dictates we should begin with what is normal, rather than what is paranormal.

There are a range of proven tools and techniques that can be used to determine what is normal but which seems paranormal – i.e. the xenonormal.

Forgetting EVP, mediumship, ghost photography, trigger objects, ITC, spiritual tools, inappropriate EMF meters and any other unscientific assumptions, rather than being distracted by this fools gold it is possible to really learn what is 'normal' in a case.

By proving what is normal, it is then possible to focus in heavily on those experiences that cannot yet be proven as normal.

This method seeks to rigorously identify all normal and xenonormal experiences in a haunting case, and flag up those experiences that cannot be proven as normal.

When these rare events present themselves it would be pseudo-scientific to adopt the false duality that anything unexplained automatically becomes paranormal. The next stage is to design rigorous research around these unexplained events, focussing on getting to the bottom of their cause.

Rather than adopting the traditional approach of drowning in the false evidence of traditional approaches – which have proven to fail, over the years – it is hoped that focussing rigorously on anything unexplained can allow us to discover something more meaningful about the nature of ghost experiences.

About this Report

This report assiduously records all events and non-events along with detailed procedures and rationales. This is designed to follow the principle of allowing replication, in theory, and presenting the full picture so conclusions can be meaningfully challenged or accepted.

As such the report is necessarily lengthy and technical. For accessibility an Executive Summary is also provided at the end, but the full report will always be presented to all parties to whom confidentiality allows.

2.0 Investigation and Ethics

2.1 Participants

The majority of PSI investigations take place within an environment where ethical sensitivity and conduct are paramount. As such all investigators are:

- Covered by Public Liability Insurance to a limit of £5,000,000.
- Checked by the Criminal Records Bureau (CRB).
- Selected by process of application form, interview and field assessment.
- Fully trained in operations, ethics, conduct and equipment use by qualified trainers.

Where investigators take the role of 'percipient' they are considered to be participants of the study. Individual differences between percipients are tracked and monitored using:

- Thalbourne's Paranormal Belief Scale
- Perception of Context Questionnaire

Investigators will be organised into three operational roles: percipients, CCTV Monitors and EF (Extraenous Factor) Auditors. All investigators will be trained to execute all roles. Whilst fluidity between roles will be encouraged, some stability of experienced operatives will be ensured. Further, investigator roles will be held constant across the three events of any given investigation.

Where investigators are familiar with the background of a case, where possible, they will not be assigned a percipient role.

Investigation 1- 8th November 08

Participants by Paranormal Belief Scale score

Team	Name	Score	Paranormal Belief
X	KI	66	3.7 – 73%
X	MH	49	2.9 – 58%
X	TC	49	2.7 – 54%
Y	SI	48	2.7 – 53%
Y	TT	43	2.4 – 48%
Y	NH	21	1.2 – 25%
X	Group Mean	56	3.1 – 62%
Y	Group Mean	38	2.1 – 42%
X+Y	Total Mean	47	2.6 – 52%

Investigation 2 – 6th December 08**Participants by Paranormal Belief Scale score**

Team	Name	Score	Paranormal Belief
X	KI	74	4.1 – 82%
X	TC	52	2.9 – 58%
Y	SI	51	2.8 – 57%
Y	TT	43	2.4 – 48%
X	DP	34	1.2 – 38%
Y	NH	25	1.5 – 29%
X	Group Mean	53	3.0 – 59%
Y	Group Mean	40	2.2 – 45%
X+Y	Total Mean	47	2.6 – 52%

Investigation 3 – 3rd January 03**Participants by Paranormal Belief Scale score**

Team	Name	Score	Paranormal Belief
X	KI	76	4.2 -84%
X	TC	49	2.7 -54%
Y	SI	45	2.3 -50%
Y	TT	43	2.4 -48%
Y	NH	24	1.3 -27%
X	UT	22	1.2 -24%
X	Group Mean	49	2.7 -54%
Y	Group Mean	37	2.1 -41%
X+Y	Total Mean	43	2.4 -48%

2.2 Equipment

Below is a full list of equipment used by PSI during investigations. Procedures for use of equipment and methodological justifications are found elsewhere in this document:

Visual Equipment

- CCTV:
 - Digital Video Recorder
 - 20 inch Dell LCD screen
 - 4 x Swann CCTV cameras
 - 2 x dictaphones, IR sender/receivers and speakers.
 - 4 x 5 metre cabling
 - 2 x 36 metre cabling
- 5 x Video cameras with infrared boosters
- 3 x Digital Cameras

Monitoring Equipment:

- 2 x Data Logging Spectrum Analysers (Spectran NF-5010)
- 2 x Testo 405-1 Velocity Stick (hotwire anemometer)
- 2 x Lascar Carbon Monoxide Data Logger (EL-USB-CO)
- 6 x Lascar Temperature Data Logger (EL-USB-TC) with 0.8mm barewire probes.
- 12 x Digital Voice Recorders (Olympus VN-3100PC)
- 2 x Infrasound Measuring Units (pending)

Operational Equipment:

- 4 x UHF Two-way radios
- Floodlight with built in tripod
- 20 x Tripods and Microphone stands
- 3 x Laptop Computers
- Power Generator
- Enclosed gazebo (outdoor Monitoring Centre and Base Room)
- Ultrasonic Distance Measure
- 4 x power extension reels

2.3 Procedures

This document mainly concerns Phenomena Investigations, but the procedures for other investigations are also included here.

2.3.1 Exploratory Fieldwork

Exploratory fieldwork takes place where:

- The location is not suitably controlled, for example an outdoors location.
- The location is not available to PSI for sufficient time to conduct a Phenomena Investigation, for example a business premises with prohibitive opening hours.
- The location is not available to PSI on a sufficient number of occasions to conduct a Research Investigation.

The functions of exploratory fieldwork are to:

- Observe the process of perceiving an environment to generate research theories for testing.
- Test the functionality of new equipment and methods.

2.3.2 Specific Research Investigations

Research investigations take place where:

- There are no vulnerable clients or clients seeking an explanation, for example a Local Authority building.
- Where the location is suitable for particular research purposes.

The functions of research investigations are to:

- Provide a location where meaningful research can be conducted and results shared with the research community. Such research should be well designed and seek to test a particular hypothesis.

2.3.3 Longitudinal Phenomena Investigations

The hypotheses and rationale for Phenomena Investigations are contained in the rest of this document.

For methodological reasons discussed elsewhere, Phenomena Investigations take place over at least three occasions; these occasions should be sufficiently far apart to allow meaningful analysis:

1. Baseline Investigation; where functions are:
 - To build the Monitoring Baseline.
 - To build the Physical Baseline.
 - To build the Extraneous Factors Baseline.
 - To build the Perception Baseline.
2. Percipient Investigation; where functions are:
 - To allow percipients to observe, in matched circumstances, compared to original reports, and monitor similarities between the two.
 - To continue to build the Monitoring, Physical and Extraneous Factors Baselines
3. Analysis Investigation; where functions are:
 - To allow percipients to observe, in matched circumstances, with knowledge of previous reports to attempt to find explanations for original reports.
 - To continue to build the Monitoring, Physical and Extraneous Factors Baselines.

- To allow group analysis of reports to attempt to find xenonormal origins for original and subsequent reports.

2.3.3.1 Pre-Investigation Procedure

The following steps should be taken prior to the first event:

- Agree terms of access with the venue and conduct a Risk Assessment.
- Ensure the venue is aware of the full procedure, in line with the Statement of Ethics.
- Fully interview all available witnesses and compile any accounts of previous activity (interviewers should not act as a Percipient during the Baseline Investigation).
- Produce a briefing of eyewitness and other findings.
- Select Areas of Study, produce a map including hotspots. Criteria for selection of Areas of Study are:
 - 2 x Percipient Areas. This should include one room with previous accounts of hauntings ('Active') and one similar room with no accounts of hauntings ('Control'). These areas should be used for Percipient Observation, percipients should not be informed which area is which.
 - 2 x Non-Percipient Areas. This should include one room with previous accounts of hauntings and one similar room with no accounts of hauntings. These areas should be subjected to CCTV and sound monitoring.
 - Where there are more than two rooms with previous haunt experiences a decision should be made based on the following paper-based criteria:
 - Recency of experiences.
 - Any experiences less explicable by non-investigative means.
 - Multiple, independent accounts.
- The circumstances of experiences should be recorded and matched during subsequent investigations.
- Establishment of location of:
 - A Base Room for rest and storage.
 - A Monitoring Centre for CCTV, sound and data logger monitoring. A set of criteria shall be applied to include: distance from Areas of Study, including measurement of sound pollution and power sources or distances from generator (including sound measurement from generator).
 - Viable areas of travel for Extraneous Factors Auditors.
 - Sound monitoring equipment around Areas of Study, locations for cameras.

2.3.3.2 Preparation

The set-up for any of these investigation events shall consist of:

Equipment and Participant Preparation, to include:

- Participant paperwork, to include: Code of Conduct and Disclaimer signing, percipient scales questionnaires and procedural paperwork.
- Time synchronisation against the talking clock between watches, laptops, voice recorders, DVR unit, camcorders and stills cameras.
- Laptop activation of data logging equipment.
- Allocation of roles and any equipment to individuals, including allocation of marked Data Loggers to percipients.
- All duplicate equipment should be allocated a unique number.

2.3.3.3 Placing of Equipment

Equipment should be placed as follows:

- Monitoring Centre: CCTV screen, DVR unit, IR units x 2, speakers x 2, mixing unit and data logging laptop.
- Non-Percipient areas, 1 x active, 1 x control: CCTV camera on tripod/stand in the corner of the room with best coverage of the room and any entrances/exits, microphone also on tripod/stand.
- Percipient areas 1 x active, 1 x control:
 - One tripod with temperature data logger for each percipient, placed within the area allocated as a 'hotspot'. These should not be moved for the whole event.
 - One Spectrum Analyser within a 'hotspot' connected to a laptop.
 - CCTV camera on tripod/stand in the corner of the room with best coverage of the percipients and all equipment.
 - At least two camcorders with IR boosters on tripods/stands covering the lines of sight of the percipients. Operatives should test all cameras to ensure crossover of IR beams does not cause unintended effects. These camcorder should only be operated during Percipient Observation sessions.
 - One voice recorder constantly recording throughout the event.
- Other areas: voice recorders should be left continuously recording for the whole event. Six recorders will be left in locations around the experimental rooms where sounds could be heard (for example in rooms on other floors, outside the room).
- A diagram must be generated of the positions of all units of equipment and of all percipients.
- All equipment should be left in its original position for the entire event.
- At the end of the event equipment should be given to analysts or return to the laptop for data logging to be completed.

2.3.3.4 Procedure for Baseline Investigations

Time	Activity	Detail
90 mins	Preparation	As above, without prior knowledge of reports
	Placing of Equipment	As above
90 mins	Extraenous Factors Baseline	Using check sheets to monitor all EFAs possible within the timeframe
	Physical Baseline	Fully record the physical environment using stills cameras
120 mins*	Perception Baseline	Percipients should remain next to a data logger within the hotspot
	CCTV Monitoring	By two nominated individuals
	Continuous EFA	Two nominated individuals to continually assess EFs and respond to others
45 mins	Disassembly	Disassembly of all equipment
	Debriefing	Debriefing as per Statement of Ethics

Event length including breaks: 6.5 Hours

2.3.3.5 Procedure for Percipient Investigations

Time	Activity	Detail
60 mins	Preparation	As above, with prior knowledge of reports
	Placing of Equipment	As above
60 mins	Extraenous Factors Baseline	Using check sheets to monitor all EFAs possible within the timeframe
	Physical Baseline	Fully record the physical environment using stills cameras
120 mins*	Percipient Observation	Percipients should remain next to a data logger within the hotspot
	CCTV Monitoring	By two nominated individuals
	Continuous EFA	Two nominated individuals to continually assess EFs and respond to others
45 mins	Disassembly	Disassembly of all equipment
	Debriefing	Debriefing as per Statement of Ethics

Event length including breaks: 5.5 Hours

2.3.3.6 Procedure for Analysis Investigations

Time	Activity	Detail
45 mins	Preparation	As above, with prior knowledge of reports
	Placing of Equipment	As above
45 mins	Extraenous Factors Baseline	Using check sheets to monitor all EFAs possible within the timeframe
	Physical Baseline	Fully record the physical environment using stills cameras
120 mins	Group Analysis	On site analysis of all original and Categories C & D subsequent reports, with supporting documentation
120 mins*	Percipient Observation	Percipients should remain next to a data logger within the hotspot
	CCTV Monitoring	By two nominated individuals
	Continuous EFA	Two nominated individuals to continually assess EFs and respond to others
45 mins	Disassembly	Disassembly of all equipment
	Debriefing	Debriefing as per Statement of Ethics

Event length including breaks: 7 Hours

* In all three procedures this condition should take place at exactly the same time for consistency of matched circumstances. This will lead to the start and end times of each event being different to one another, in order to keep this Percipient Observation time consistent.

2.3.3.7 Percipient Observation Procedure

- The circumstances in each Area of Study should match circumstances of original accounts. The general time of day/night and the level of lighting in the room should match these as closely as possible.
- No equipment should be moved during the course of the event.

- Percipients should remain in a seat next to their marked Data Logger.
- Everyone set of investigations should focus on two control and two experimental areas.
- Percipients should be randomly assigned to two groups that should spend one session in each of the two experimental areas, in a randomly generated order.
- Each session should be rotated in two, 30 minute blocks:
 - 10 minutes: Silent observation.
 - 10 minutes: Observation in conversation.
 - 10 minutes: Engaging in a self-distracting activity.
- In each group there will be the following roles:
 - Person A: Group spokesperson to the other units, using the radio.
 - Person B: Group spokesperson using the voice recorder. Every percipient should state unusual experience (including possible natural causes) in precise terms; this should be recorded. Person B should also co-ordinate use of stills cameras (as below).
 - Person C: Holder of the anemometer, to measure any draughts where percipients experience temperature fluctuations. Person C will cease to be a percipient for the time it takes to take anemometer measurements.
 - Person D: Responsible for ensuring the changing of tapes in each camcorder prior to each session commencing.
- Percipients should only use stills cameras after an experience has been reported, and only where the experience has some sort of visual reference point. Two cameras should be used to capture the exact location of the experience, to provide objective visual evidence of the location of the experience.

2.3.3.8 CCTV Monitoring Procedure

- CCTV Monitors should observe the four CCTV cameras throughout percipient sessions. Monitors should also listen to audio streams in control rooms.
- There should be the following roles:
 - Person A: Spokesperson on the voice recorder. All visual or auditory events in any of the four locations should be recorded onto a voice recorder, in specific detail.
 - Person B: Holder of the radio to communicate with the percipient groups and inform the EF Auditors of any potential EFAs. Also to monitor all time keeping for all groups.

2.3.3.9 Extraenous Factor (EF) Auditor Procedure

- EF Auditors should use agreed routes to traverse a location highlighting any EFAs throughout the course of percipient sessions, independent of the Percipient Observation.
- There should be the following roles:
 - Person A: Spokesperson on the voice recorder. Any emerging EFAs in any area should be recorded in detail.
 - Person B: Holder of the radio to communicate with the percipient groups and CCTV monitors to advise or be advised of any potential EFAs.

2.4 Methodological Detail

Much modern 'paranormal investigation' is based on a TV-inspired, assumption-led approach. The cornerstone of a rational, scientific approach is a defined, justified methodology.

So often methods are implied and unquestioned. The assumption-led approach analogises the investigation of hauntings to 'UFO spotting'. The assumption goes that ghosts exist, so that all one has to do is sit and wait for one to appear. A rational approach to the field recognises that haunting experience is often a psychological phenomena, calling for matched circumstances, control conditions and assiduous recording of the natural environment rather than sitting and waiting for an ambiguous experience

A rational approach also dictates that we place an emphasis on understanding what is normal, before trying to understand what is unexplained. This compares to the assumption-led, often unjustified approach of using unproven (and often disproven) tools such as EMF meters, stills cameras and EVP. Such methods typically go unjustified and when questioned all that is forthcoming is pseudo-scientific guesswork.

This section seeks to justify everything an investigation involves, from a rational standpoint.

The Xenonormal Approach

'Xenonormal' defines as something that is normal but unexplained at the time (literally, foreign). Most paranormal investigators – with the possible exception of the purely religious-spiritualist approach – are somewhat concerned with the xenonormal. The vast majority of ghost experiences – be they by experiences during investigations or original eyewitnesses – appear to be xenonormal events that are attributed as 'paranormal' where either the belief or expectation exists to place that label on an unexplained event.

Rationally it is necessary to fully focus on explaining that is normal before considering what remains. In some circles a 'false duality' exists that suggests that anything that cannot be explained as normal must be, by default, paranormal.

False duality is a hallmark of pseudo-science. Lack of evidence for the normal does not provide evidence for the paranormal and such events are merely left as 'unexplained at that particular time'. Often the 'normal' itself is lost because of the employment of myriad pseudo-scientific methods. A focus on EVP, spiritualism, photography, experiencing, etc, means that there is little time for the tireless search for the 'normal'.

Concentration of financial and human resources on pseudo-scientific methods also means that these resources cannot be fully invested in explaining normal events.

The result of this full focus on the 'xenonormal' means that this methodology may, rarely, leave a truly significant event unexplained. Further methods can then be used to focus on these interesting events, rather than such events being 'lost' in the mountains of fools gold of pseudo-scientific evidence.

The most obvious result of the xenonormal approach is that all instruments used are focussed on this goal and human resources are employed to explain the normal and in control conditions, to allow comparison.

The Nature of Ghost Experience

One of the first methodological questions to address is what we actually know about the nature of 'ghost experience'. Evidence from three years of standardised

PSI investigations suggests that such experiences are often 'subjective' rather than 'objective'. This means that where one person has an experience but the people in the immediate vicinity do not, the source is more likely to be an internal psychological construct rather than an objective event.

Clearly an experience becomes more compelling where several individuals multiply experience and where objective recording tools can be used to assess its subject or objective evidential status.

It is generally recognised that human beings are poor recorders of unusual events. Events with an objective cause can often be psychologically misinterpreted; and studies of human memory show its fallibility in anything but the very short term. This has an impact on the analysis of evidence – an uncorroborated experience is likely to be psychological – in short, seeing is not believing. An impact is also had on the recording of experiences in that our fallible memories should never be relied on for anything.

Recording of Data

Individual experiences should be objectively recorded immediately rather than relying on fallible memory. As such pen and paper recording is inappropriate, as the method relies on notes as an *aide memoir* to fill in the details later.

Consequently the only objective way to record is full explanations being immediately recorded on Dictaphone and fully transcribed and permanently recorded. In analysis the unfortunate side effect of priming of others should be given due weight.

Use of Control Conditions

The use of 'control' is a cornerstone of the scientific method. However it may seem like madness from the assumption-led approach in place equal emphasis on 'haunted' and 'non-haunted' areas (defined by eyewitness accounts).

Hauntings being often psychological events require a level of comparison, necessitating control. If an experience is derived from expectation coupled with ambiguous stimuli and a 'spooky' environment, it is important to control these factors. The logical result is the 'pairing' of rooms within a location. Matching two areas – one 'active' and one 'control', and not telling percipients which is which – ensuring they are as similar as possible, allows the analyst to conclude whether it was the circumstances and environment caused experiences, as opposed to the 'active' status of the room.

The question remains of whether 'ghost experiences' are purely resultant of the perception of individuals. One question is whether there is something objectively and physically 'different' about 'active' locations, or whether any experiences are purely on a psychological level. This logically leads to the practice of having a further 'matched pair' of rooms that are objectively monitored remotely and recorded by CCTV. Again one is 'active' and one 'control' to allow for comparison, and percipients do not enter these rooms at all.

This allows the building of a full picture of an untouched area, to assess whether there are any physical differences between 'active' and 'control' areas, helping us to better understand whether 'ghost experiences' are subjective or objective. This involves continuous, remote monitoring and post-event assessment of physical changes in the environment by running the footage through a motion sensor programme.

Unscientific and Pseudo-Scientific Tools and Methods

As previously noted this method seeks to use proven methods for finding xenonormal phenomena. As such using unproven or disproven tools and methods are deemed inappropriate.

Attempts to use such unscientific methods typically form part of an assumption-led approach that assumes that prior paranormal experience leads to a location being haunted. Such tools and methods are then used to either 'gather evidence' or to try to build evidence that such tools are appropriate for 'gathering evidence'. In the former case, such tools are either unproven, or have been disproven, as being associated with paranormal phenomena; therefore using them is undoubtedly irrational and unscientific. In the latter case, attempting to draw associations with paranormal events is fraught with methodological difficulty. Gathering 'anecdotal' evidence with such tools and methods – without assiduous recording of non-events, and hence suffering from poor probabilistic reasoning – does not contribute to scientific evidence. PSI conducted a standardised, three-year test of the below equipment and methods. Results were used to assess such tools and methods for usefulness and validity:

EMF Meters. Various paranormal theories abound relating to presence of electromagnetic fields (EMF) and how it may either be 'caused' by a ghost or, conversely may 'cause' a ghost. Needless to say no theoretical justification or model has ever been presented to back this up. The likely route of these theories is a misreading of peer-reviewed studies that demonstrated that weak, complex magnetic fields can cause hallucinations that can be misinterpreted by a primed individual. Once such misinterpreted understandings have taken hold, they are subsequently reinforced by poor probabilistic reasoning – for example any anecdotal coinciding of explainable EMF fluctuations with paranormal experience is not assessed for the rule of chance. In PSI's three year study we found that the role of chance more than accounted for any such coincidences.

Ultrasonic, Humidity, Air Pressure and Ion Detectors. Similar fringe theories have developed about the role of ultrasound, air ions and other possible fluctuations. Again there has been no theoretical justification for such theories. Again, use over PSI's three-year study showed that coincidences were accounted for by chance.

Electronic Voice Phenomena (EVP). EVP – or allegedly the voices of the departed – have held interest for a number of decades. Needless to say many investigations use such methods, often with the result that methodological error or misattribution causes 'evidence'. It was known that factors such as: uncontrolled environments (movement in a building, sound recorders left unattended, speaking or whispering), radio frequency interference (RFI – where the use of white noise, a detuned radio, can pick up stray radio broadcasts) and technical factors (like lack of account of the Auto Gain Circuit and use of recorders with internal moving parts) all provide compelling natural causes. PSI conducted three hundred experimental EVP conditions, over three years, where these factors were accounted for.

Specifically, 'pure' generated white noise was used, digital voice recorders were used and experiments were silently and continuously monitored. No clear 'EVP' voices – at all – were established. This suggests that EVP – as well as not having a theoretical justification – produced at best no evidence, and at worst misattributed evidence. Past EVP studies may justify the need for studying the phenomena in independent and dedicated settings, but the lack of methodological justification and ethical problems attached does not justify its use during investigations.

Trigger Objects/kinetic experiments. Historical 'evidence' of 'ghosts' moving objects – for example in so-called 'Poltergeist' cases – has led to the placing of

objects during paranormal investigations, in expectation that a 'ghost' might move them. Again, problems of fraud, accidental movement and objective recording have provided problems for any 'evidence' gathered in this way – not to mention the myriad alternative causes for low-level movement. PSI's three-year study set up over one hundred and fifty such experiments over three years. Factors involving fraud, accidental movements were accounted for by continuous use of video cameras; which also served to provide an indication of possible vibration. In none of these experiments did a trigger object move. The lack of any compelling video evidence for trigger object movement leads to the conclusion that this – as well as being an assumption-led approach – has no practical merit as a dedicated activity.

Photography. Attempting to take photographs of 'ghosts' is a popular, assumption-led activity. In PSI's three-year study over three thousand photographs were taken and analysed. The presentation of 'ghost photos' seem to rely on the twin problems of low-light creating technical artefacts and users with little knowledge of the workings of cameras and the sorts of errors they can produce in certain circumstances. As none of the thousands of photographs were inexplicable – and as no compelling 'ghost photo' has ever been captured – this assumption-led approach can be viewed as a waste of scarce resources.

Every 'new' paranormal investigation tool seems to rely on the presentation of ambiguous stimuli. For example audio units converting EM fields into sounds, which basically present scrambled sound which is ripe for the biased mind to endogenously interpret. Another category is the presentation of seriously flawed tools – like the KII meter – which are so prone to user error that they greatly increase false readings, allowing the biased mind to observe coincidences between false readings and other events.

Further Avoiding the Assumption-Led Approach

The assumption-led approach pre-supposes the existence of ghosts and haunted houses, it assumes that these phenomena are caused by discarnate entities or dead people and assumes that by being in such a location ample evidence can be gathered to prove the existence of the paranormal. Whether these ideas are inaccurate or accurate has not been proven, but the assumption of them involves biases, which preclude rational enquiry.

The assumption that any ambiguous experiences may be paranormal leads to the adoption of techniques that reinforce such experiences. One example is conducting investigations at night, and automatically turning the lights off. There is little doubt that such an approach generates more ambiguous experiences – for example shifting shadows as eyes adjust to the talk and moving lights caused by unconscious eyeball movement – but these experiences are known to be xenonormal (and hence naturally explicable).

The assumption-led approach treats the original reported experience at a location as the baseline for gathering evidence. This method treats the original experience as central to the enquiry; if original experiences were explicable then any given case could be the result of misattribution. Therefore under this method – as far as it practically possible – circumstances are matched to the original reports so as to understand and analyse them more effectively. This includes the time of day or night and the level of lighting matching the original reports.

Another hallmark of the assumption-led approach is the assumption that the cause of any experiences is some form of historical figure. Therefore historical research is often under-taken and an attempt to match such data to experiences. Poor interpretation and poor probabilistic reasoning are rife in such practices. In this

method historical research is held to be an unnecessary distraction of resources, simply allowing for poor assumptions to be made which are likely to be the result of chance.

Investigating the Xenonormal: Basic Approach

To understand what cannot be explained at a site an investigation must primarily consider what can be explained. The principle of 'baseline' is widely applied by paranormal investigators, but not in a rational way.

To truly understand what is normal it is necessary to visit and record a site over an extended period of time, over multiple visits.

Establishing a Baseline

Common practice would be 'baseline check' equipment periodically over one night. This leads to three major problems:

- Most equipment measures highly localised variables. The common practice of using portable equipment and periodically taking readings means that the reading is only relevant to particular position. As such walking around a location (even only a few inches) and reporting variation is meaningless.
- The natural variations an investigation is trying to establish in a location may be gradual – taking place over minutes – or may be more time sensitive. Taking readings on the basis of a few minutes leads to a high likelihood of missing variations. This is especially important where a reading is taken at the time of a possible paranormal event.
- A baseline is only being established for a particular room on a particular day. Any given baseline reading may be, for example, the highest or lowest point on any given day, week or area.

All of these problems must be addressed to achieve meaningful baseline readings. Firstly equipment should be absolutely stationary throughout an entire investigation – not even just during sessions – and must assume the same position in subsequent visits. Readings should be logged in a timeframe suitable to the measure. For temperature, variation once a second might be sufficient, whereas for measuring Experience Inducing Fields (see below) readings should be taken one hundred and twenty times per second.

Finally it would be desirable for equipment to build up a picture of a location, continuously, over months. As this tends not to be practical in most locations, both visiting on multiple occasions and establishing a positional baseline (two identical pieces of equipment running simultaneously in similar locations) is an absolute minimum alternative.

Establishing a baseline is not only necessary for equipment readings. Establishing a physical baseline is also useful. Specifically every aspect and angle of an area under study should be recorded, and then continue to be physically monitored (by CCTV and/or video camera) throughout the entire event. This not only useful during subsequent analysis – tracking visual clues for anomalous experiences – but can be useful in the event of claims of kinetic events.

Establishing Parity between Equipment

Paired models of equipment used to establish a positional baseline, or those which would be used across locations in tandem with others suffer from the need to establish parity between the two, or measure the deviation. This method calls for equipment use on a non-comparative basis – they are assigned to areas and are compared to individual experience, rather than to one another. As such, testing for parity is not important in this method.

Percipients and Baselines

An experience baseline can be usefully employed. There is little doubt that knowledge of previous reported events can guide the perception of individual percipients. Knowledge of previous events is important to allow percipients to seek natural, xenonormal causes for previous reports. However this necessary knowledge itself may impact on the perceptory abilities of percipients. As such an experience baseline can be established during the first investigation event, where percipients do not have knowledge of previous accounts. This allows a picture to be built of what ambiguous stimuli and anomalous events are likely to be perceived, without the confounding variable of this knowledge. This leads to practical necessities such as those with knowledge of previous events not being allocated to – or even leading, to avoid experimenter effects – percipient teams. Similarly, once this baseline has been established the composition of percipient teams should remain the same.

The exact time of percipient sessions should also remain constant. Whilst other events during the investigation may vary these should stay the same, operationally leading to subtle shifts the exact starting and ending time of investigations in the same location.

Whilst in percipient sessions, percipients are instructed to report any ambiguous stimuli, anomalous experiences and any potential causes for anomalous experiences. States of attentiveness are systematically varied across percipient sessions – in silence, conversation and in engaging activity. This is primarily to recognise that anomalous events are experienced in different states of attentiveness (and this might have an impact on the perception of ambiguous stimuli) but also to counter fatigue in percipients.

Extraneous Factors Auditing

Another aspect of building a picture of what is normal about a location is a full audit of any sensory input in or around the location that – in the right circumstances – could be misinterpreted as a paranormal event.

Similar to the concept of baselining, building a picture of the EF of a location cannot be completed prior to one investigation, or even across one investigation. As such this method incorporates a group assessment of EF but supplemented by two dedicated personnel whose role it is the continuous audit EFs, in communication with percipients and CCTV monitoring personnel.

Xenonormal Events

Standardised procedures over a three-year period have informed the categories of xenonormal events that may be perceived during an investigation. As mentioned previously, investigations focus on uncovering the xenonormal. As such, techniques and tools are specifically used to monitor possible xenonormal events.

These include:

Xenonormal/Anomalous Event	Monitoring Method
Visual events	All participants, their line of sight, and all areas of study will be monitored by CCTV and video cameras
Tactile events	
Kinetic events	
Auditory events	All areas will be monitored by CCTV and audio recorders will be placed across the location

Unusual feelings and sensations	Impossible to objectively monitor* (however locations will be monitored for EIFs, CO and Infrasound)
Hot/cold sensation	Static temperature data loggers and hotwire anemometers
Extra-sensory impressions	Impossible to objectively monitor*

* Individual difference scales may also inform such attributions.

Xenonormal Monitoring Tools and Methods

All tools and methods have been stripped back to those useful for objectively identifying the cause of potential anomalous events. This section will consider the rationale of the use of such tools and methods.

Video and CCTV: Objective Physical Recording

Objectively recording a physical environment typically justifies the use of camcorders and stills cameras. One theory of physical monitoring is to assess whether 'ghosts' can be physically recorded, as opposed to being subjectively experienced. The result of this assumption-led approach is the time-costly analysis of video footage and stills photographs to observe anything 'unusual'. A rational perspective suggests that these methods are inappropriate. Three years of many hours of recording – assiduously analysed after the event – and many thousands of photographs taken have resulted in almost no footage or photographs that cannot be accounted for as natural.

Where 'unusual' evidence emerges it typically takes analysts with an in-depth knowledge of photography and videography to uncover the natural or technical causes presented in the more unusual cases. Where hundreds of hours of footage and many thousands of photographs have resulted in nothing that cannot be explained – coupled with the practice itself being pseudo-scientific and assumption-led – it is clear these methods cannot be justified. Further, the time used to employ these methods can be much more effectively spent pursuing the xenonormal.

Often investigators will try to cover as much ground as possible by allocating one video camera per room, this is based on the idea of wanting to effectively use scarce resources to maximise the chance of 'catching a ghost'. This is another example of an assumption-led method that sacrifices the chances of being able to find xenonormal explanations.

Specifically, where one video camera records a room of four or more experiences experience shows that there is a very slim chance of the video camera being in the correct position to 'show' the area where an experience is taking place; more commonly the investigators reaction is recorded.

The xenonormal method of trying to objectively verify experiences – to assess them for objective or subjective cause – leads to the necessity of a minimum of three or four video cameras (one being CCTV) in each room where experiences are positioned.

The 'baseline' of the physical environment can be important for some 'experiences', particularly where they require knowledge of the original positioning of items (which may be claimed to move) and the location of anything physical that might explain an unusual experience after the event. This creates the only justifiable use for stills photographs – painstaking physical baselining, rather than 'attempting to photograph ghosts'.

Audio Recording

Audio recording is often confined to EVP and the audio function of video cameras. The primary flaw in recording sound to subsequently review is the likelihood of ambiguous noises occurring. Ambiguous noises may be caused, for example, by people moving through a building, internal physical functions of the recorder (be it audio or video/audio) or even by the Audio Gain Circuit of the audio or video/audio unit. A common operational flaw of tracking auditory phenomena is insufficient recording devices.

This method calls for a quantity of numbered audio recorders in different areas throughout the location, so auditory phenomena can be tracked to source and analysed as a closer event.

Measuring Experience Inducing Fields (EIFs)

The work of Townsend and Braithwaite's Magnetic Anomaly Detection System (MADS) project has seen evidence of the role of EIFs enter peer-reviewed publications. The developers postulate that such EIFs may be a major factor in a small number of haunting cases. There are myriad potential causes for such fields. Though natural geomagnetics can conceivably produce natural EIFs, but in practice it is more likely to be caused by the movement or vibration of materials with high magnetic permeability.

The research has demonstrated that weak, low frequency, complex magnetic fields can affect the brain in such a way as to cause hallucinations that may contribute to hauntings, in the right context. The specific fields may affect up to 30% of the population and occur where subjects are exposed for upwards of twenty minutes with extremely low frequency magnetic fields. The magnetic field frequency may be of 0.1 to 30 Hz and the amplitude of 100 to 5000 nT. Sampling is needed at the rate of one hundred and twenty per second, being more than twice mains frequency (Nyquist criterion), so that it can be eliminated, being a common ambient field in buildings.

Most electromagnetic field meters are calibrated to measure AC fields whilst even meters specifically designed to exclude AC fields are insufficiently sensitively collaborated to measure EIFs. Crucially, they do not tell you the relative contributions of different frequencies. The Spectran NF Professional series is the only known 'off the shelf' meter than performs spectrum analysis. Whilst EIFs can occur at 0.1 to 30 Hz, the Spectran NF5010 can only measure the majority of EIFs, at 1 to 30 Hz.

Paired Spectran NF5010 units data log to laptops, as the thirty six thousand data points logged on the average investigation cannot be internally stored. One unit is positioned in the Experiencer 'Active' Area and one in the Experiencer 'Control' Area to allow comparison. As EIFs are likely to be a factor in a small number of locations the units are used to provide a cursory indication of this factor. Where this factor is identified a specific investigation would utilise a hired MADS unit to measure with greater accuracy.

Measuring Infrasound

Infrasound is sound (typically) inaudible to the human ear due to its low frequency (specifically, lower than 20 Hz). Tandy and subsequent experimenters hypothesised that a certain frequency – typically cited at 18.9 Hz – that could be responsible for misattributed haunting phenomena. It has long been known that infrasound can cause unusual sensations (such as nausea and a sense of unease); and we already know that in the right context, witnesses will interpret ambiguous stimuli as anomalous events.

The infrasound theory further purports that visual disturbances and even hallucination can be caused by oscillations of the eyeball at this frequency. Whilst current evidence does not seem to support this latter assertion it should be noted that research into infrasound is ongoing. Also, the less controversial ambiguous sensations caused by infrasound are worthy as measuring as potential factors in themselves; although infrasound is estimated to be a factor in a small number of cases. However it should be noted that the cause of particular instances of infrasound could also be the cause of EIFs so, as such, neither should be measure in isolation in case of this confounding variable.

This method hopes soon to incorporate the use of Infrasound Measuring Equipment, currently being developed by academics at the forefront of infrasound research.

Measuring Carbon Monoxide Levels

CO poisoning is another possible cause of misattributed haunting experience, although possibly less likely in any individual case than EIFs or Infrasound. At lower levels CO can cause unusual sensations (such as nausea, confusion, impaired hearing and vision) and at more dangerous levels can cause hallucinations.

CO data loggers are used in both Percipient 'Active' Areas and Percipient 'Control' Areas to rule out this theoretically possible but practically unlike cause of ambiguous sensations that can be attributed to paranormal events.

Measuring Individual Differences

PSI's three-year standardised investigations tracked individual 'paranormal belief' and 'perception of context'. Results suggested that these played a role in reporting possible paranormal events. Feelings at the moment were also tracked but were not demonstrated to impact on reporting rates.

A correlation emerged between reporting of subjective experiences and level of paranormal belief. Whilst the nature of correlations is to be open to interpretation either way, the most likely explanation would seem to be those of a higher belief are more likely to attend to ambiguous events and attribute them as anomalous. Similarly, there was a less clear correlation between initial perception of 'spooky' context and rates of experience reporting. Again a more likely explanation is that if an environment is perceived to be conducive to experiences, ambiguous events are more likely to be attended to and attributed as anomalous.

It should be noted that individual difference data should be treated with great caution, but in individual cases may shed light on the nature of a subjective experience.

Measuring Perceived Temperature Fluctuation

The perception of increase or decrease in temperature was found by PSI's three year study to be a common anomalous report, and is anecdotally held to be a common 'symptom' of haunting experience.

Perception of change in temperature can be an endogenous or exogenous experience – this is, it can be an internal physiological event or an objective variation in temperature or draught. This method calls for the distinction between such subjective and objective events, and attempting to find natural causes for objective events.

This method uses temperature data loggers to track variation in temperature and hotwire anemometers to track draughts.

For all the simplicity of measuring temperature, these are tools so often used inappropriately by paranormal investigators. Various theories exist suggesting that temperature fluctuations are linked to paranormal experience. This assumption-led theory has no theoretical or evidential (beyond anecdotal) basis. However most of the theories (and indeed the xenonormal causes for experiences this method is concerned with) call for the highly localised measurement of temperature fluctuation. As noted previously, establishing a baseline is crucial here. As such, moving temperature gauges instantly compromises your baseline; by moving a temperature gauge to a different area (where an experience is being had) any data as to the previous temperature is lost. As temperature fluctuations linked to experiences are highly time sensitive this rules out the use of non-data logging gauges. If temperature is only measured occasionally, a continuous baseline (from which to measure deviations) cannot be established. Non-contact (infrared, thermogun-style) measures are also inappropriate, as these do not measure ambient temperature, only surface temperature of a target; additionally because of this functionality, a baseline cannot be reliably established.

The traditional limitations of data loggers were their insensitivity: being slightly shielded and only suitable for logging every ten seconds (clearly inappropriate for time sensitive experiences). This method uses a new brand of thermocouple data logger than logs every second, which is clearly the least worst option. However measurements are still localised and the data loggers should not be moved, so as to preserve their baseline. The imperfect solution is to allocate a data logger to every experiencer, and ensure the experiencer does not move away from the data logger during percipient sessions.

The 'wind chill' effect of draughts do not objectively vary temperature, but merely provide a cooling effect to the skin. The unfortunate result is that temperature gauges are useless for measuring draughts. Inexpensive 'vein' style anemometers are inappropriate for the sensitive measurement of draughts, due to the minimum speed needed to rotate the vein and the dependence on the correct angle of the vein. Hotwire anemometers of a higher sensitivity largely overcome these flaws. However a meaningful baseline cannot be accurately established with handheld meters. As such a handheld anemometer which attempts to record readings and establish a baseline after the event is the least worst option.

2.6 Statement of Ethics

Ethical conduct is of great importance when conducting research, especially as human participants are involved and an individual's properties are often the setting. Below are the basic ethical tenets applied to each aspect of investigating.

Doing no harm

This relates to not putting participants at risk of undue physical, emotional or psychological harm during an investigation, and being insured against public liability. Participants are chosen via a rigorous selection and training procedure that ensures they are, amongst other things, of a suitable mindset to participate. PSI carries out risk assessments in conjunction with venues, and all relevant equipment is PAT tested. PSI has an obligation to assess all experimental methods for harmful impact upon participants, and to provide post-investigation and post-experiment support to participants.

The ethical principle of doing no harm also extends to potential harm to the living- or working- environment of venue owners and workers. So-called 'spirit communication tools' are not used, being both scientifically unproven and generating the serious risk of an exacerbated perception of 'haunting' by clients. Further, the use of unproven tools and methods to 'gather paranormal evidence' is potentially harmful and are thus not utilised.

Similarly, 'paranormal conclusions' are not drawn under this method; such an approach would be equally unscientific and risks the exacerbated perception of 'haunting' by clients.

Post investigation support is always made available to venue owners or managers.

Consent

No person who is deemed unfit to give informed consent may participate.

All individuals participate with informed consent and no individuals under the age of 18 are permitted to participate in PSI investigations.

Similarly, investigations always operate with the informed consent of venue owners or managers, including outdoors locations investigated.

Deception

All participants are fully briefed, trained and are aware of all research objectives.

For methodological reasons, during Baseline Investigations the nature of previous accounts of experiences, including which rooms under investigation have or do not have previous accounts, are withheld from percipients.

Venue owners or managers are made fully aware of all methods used during the investigation. Similarly the purpose of PSI investigations are made clear to venue owners or managers.

Freedom to withdraw

All participants are free to withdraw at any time. Further, venue owners have the right to halt any investigations at any time. Venue owners are made aware of this right prior to the investigation.

Confidentiality

All evidence and information gathered on investigations is held in confidence within the organisation where requested or more commonly where agreed by experimenters. It is frequently deemed unsuitable for the sum total of evidence gathered to be made publicly available. Confidentiality applies to working with the mass media.

Whilst the experience of individual participants is not kept confidential, except where otherwise requested, all participants names are removed.

For these purposes the organisation is defined as constrained to trained team members, and consultants associated with PSI to whom confidentiality is occasionally extended.

Debriefing

All participants are fully debriefed and offload experiences at the end of investigations, to ensure they leave the in the same psychological state in which they arrived. PSI has follow up procedures should participants need to discuss any issues after an investigation.

Reporting research

PSI has a duty to take due care in any reporting of results, especially to the media. PSI takes the responsibility as being seen as 'representing' the field very seriously. PSI never sensationalises evidence or vies for attention. PSI never makes unscientific claims, including asserting that a property is 'haunted', or 'not haunted'. For reasons of accessibility and Executive Summary is provided along with the full report.

Treatment of venues and owners

All venues and owners are treated with respect at all times. PSI always shares results with venues, abides by their wishes and continues contact for as long as venues and owners need.

As mentioned previously, ethical responsibility extends to not conducting investigations in any way which might cause a venue to feel any 'presence' they feel has been exacerbated. PSI never performs 'clearances', but can refer venue owners to suitable individuals or groups should they request that information. PSI has special and separate ethical procedures for dealing with private homes and families.

2.7 Areas under Study

The areas under study were restricted to the following:

Code	Area	Lighting	Condition 1	Condition 2
A	Fire Room	Torchlight	Percipient	Control
B	Small room	Torchlight	Percipient	'Active'
C	1 st Floor Corridor	Full	Non-Percipient	'Active'
D	2 nd Floor Corridor	Full	Non-Percipient	Control

Areas were selected according to the following criteria:

- 'Active' and 'control'. To allow comparison between them, two pairs of rooms were matched as 'active' and 'control'. 'Active' rooms had reported some unexplained phenomena in the past whilst 'control' rooms had not.
- Matching. To allow a meaningful comparison each 'active' room was matched with a 'control' room as physically similar as the location allowed.
- Operations. Rooms were further defined by those accessible to researchers and by and for equipment and other purposes.

As the method demands, the level of lighting in each room matched as closely as possible the original accounts by eyewitnesses.

Only two rooms were used by percipients whilst one 'active' and one 'control' room was only observed remotely, by CCTV, so that any objective differences between locations could be recorded.

2.8 Investigation 1: Schedule & Allocations

8th November 2008

Actual Timescale for Investigation 1800 to 0100

Time	Activity	Person Allocation
1800	Arrive venue	
1810	Preparation & Equipment	OT + Percipient Teams: PBQ and Contexting EX + CCTV/EFA Teams: Walk/Chair/Maps EX: Sign-out, Allocate other Equipment Prep: Watches/laptops/: SI, MH Prep: Camera/Camcorders: NH, TX Prep: Voice Recorders: TT, KI Prep: Setting Loggers: OT, TC Prep: Put Loggers on Stands: UT Set: CCTV Monitoring: KI, TT Set: CCTV Remote Cameras: TC, MH Set: Data Loggers, Camcorders: NH, TX Set: Spectrum Analysers: OT, SI, UT Set: Voice Recorders: OT, SI, UT
2030	Break	
2040	Baselines	EFA:EX, SI, MH, NC, UT, KI, TC Physical Baseline: OT, TT, NH, TX
2125	Break	
2200	Session 1	Team X: Area A Team Y: Area B
2300	Break	
2315	Session 2	Team X: Area B Team Y: Area A
0015	End	
0030	Disassembly, Allocation for Evidence and Debrief	
0100	Depart	

Team Allocations

Team X	Team Y	EF Auditors	CCTV Monitors
A (Radio) – TC	A (Radio) – SI	A (Voice R.) – UT	A (Voice R.) – TX
B (Voice R.) – KI	B (Voice R.) – NH	B (Radio) – EX	B (Radio) – OT
C (Cameras) – MH	C (Cameras) – TT		

Equipment Allocations

Equipment	Unit	Person	Area	Map Reference
Data Loggers	1A	TC/SI	A	
Data Loggers	2A	DP/TT	A	
Data Loggers	3A	KI/NP	A	
Data Loggers	4B	TC/SI	B	
Data Loggers	5B	DP/TT	B	
Data Loggers	6B	KI/NH	B	
Radio Units	R1	TC	-	-
Radio Units	R2	OT	-	-
Radio Units	R3	EX	-	-
Radio Units	R4	SI		-
Voice Recorders	V1	KI	-	-
Voice Recorders	V2	NH	-	-
Voice Recorders	V3	UT	-	-
Voice Recorders	V4	TX	-	-
Voice Recorders	V5	-		
Voice Recorders	V6	-		
Voice Recorders	V7	-	C	
Voice Recorders	V8	-	D	
Voice Recorders	V9	-		Ground floor corridor
Voice Recorders	V10	-	B	
Voice Recorders	V11	-		Ground floor base of stairs
Voice Recorders	V12	-	A	
Voice Recorders	V13	-		
Voice Recorders	V14	-		
Spectrum Analyser	S1	-	A	
Spectrum Analyser	S2	-	B	
CCTV Cameras	CCTV1	-	A	
CCTV Cameras	CCTV2	-	B	
CCTV Cameras	CCTV3	-		
CCTV Cameras	CCTV4	-		
Camcorders	NH	-	B	Camcorder Code not known
Camcorders	EX	-	A	Camcorder Code not known
Camcorders	TT	-		
Camcorders	TX-T	-		
Camcorders	TX-M	-		

2.9 Investigation 2: Schedule & Allocations

6th December 2008

Actual Timescale for Investigation 1800 to 00.15

Time	Activity	Person Allocation
1800	Arrive venue	
1815	Preparation & Equipment	DW: Co-ordination OT: Briefing, legal and medical forms, briefing of events OT + percipient teams: PBQ and contexting EX + CCTV/EFA Teams: Walk/chair/maps EX: Sign-out, Allocate other Equipment Prep: Watches/laptops: SI Prep: Camera/camcorders: NH, TT Prep: Voice Recorders: DP, OT, UT Set: CCTV monitoring: KI, TC Set: CCTV remote cameras: KI, TC Set: Camcorders/voice recorders: NH, TT Set: Loggers/standing/placing: OT, DP Set: Spectrum analysers: UT, SI
2000	Break	
2015	Baselines	EFA: EX, SI, NC, UT, KI, TC, DP Physical Baseline: OT, TT, NH
2055	Break	
2121	Session 1	Team X: Area A Team Y: Area B
2221	Break	
2241	Session 2	Team X: Area B Team Y: Area A
2341	Disassembly, Allocation for Evidence and Debrief	
0015	End	

Team Allocations

Team X	Team Y	EF Auditors	CCTV Monitors
A (Radio) – TC	A (Radio) – SI	A (Voice R.) – UT	A (Voice R.)
B (Voice R.) – KI	B (Voice R.) – NH	B (Radio) – EX	B (Radio) – OT
C (Cameras) – DP	C (Cameras) – TT		

Equipment Allocations

Equipment	Unit	Person	Area
Data Loggers	1A	TC/SI	A
Data Loggers	2A	DP/TT	A
Data Loggers	3A	KI/NP	A
Data Loggers	4B	TC/SI	B
Data Loggers	5B	DP/TT	B
Data Loggers	6B	KI/NH	B
CO	B	-	B
CO	A	-	A
Radio Units	R1	TC	A/B
Radio Units	R2	OT	-
Radio Units	R3	EX	-
Radio Units	R4	SI	B/A
Voice Recorders	V1	KI	-
Voice Recorders	V2	NH	-
Voice Recorders	V3	UT	-
Voice Recorders	V4	OT	-
Voice Recorders	V5	-	
Voice Recorders	V6	-	
Voice Recorders	V7	-	C
Voice Recorders	V8	-	D
Voice Recorders	V9	-	Corridor between A & B
Voice Recorders	V10	-	B
Voice Recorders	V11	-	Bottom of stairs up to C
Voice Recorders	V12	-	A
Voice Recorders	V13	-	
Voice Recorders	V14	-	
Spectrum Analyser	S1	-	A
Spectrum Analyser	S2	-	B
CCTV Cameras	CCTV1	-	A
CCTV Cameras	CCTV2	-	B
CCTV Cameras	CCTV3	-	C
CCTV Cameras	CCTV4	-	D
Camcorders	NH	-	A
Camcorders	EX	-	B
Camcorders	TT	-	
Camcorders	TX-T	-	
Camcorders	TX-M	-	

2.10 Investigation 3 Schedule & Allocations

3rd January 2009

Actual timescale for events 1800 – 0030

Time	Activity	Person Allocation
1800	Arrive venue	
1815	Preparation & Equipment	<p>EX: Co-ordination OT: Briefing, Legal and Medical forms, briefing of events</p> <hr/> <p>OT + Percipient Teams: PBQ and Contexting EX + CCTV/EFA Teams: Walk/Chair/Maps</p> <hr/> <p>EX: Sign-out, Allocate other Equipment Prep: Watches/laptops: SI, TT Prep: Camera/Camcorders: NH, TX Prep: Voice Recorders: OT, UT Set: CCTV Monitoring: KI, TC Set: CCTV Remote Cameras: KI, TC Set: Camcorders/Voice Recorders: NH, TX Set: Loggers/Standing/Placing: OT, TT Set: Spectrum Analysers: UT, SI</p>
1930	Break	
1945	Baselines	EFA: OT, SI, NC, UT, KI, TC, TX Physical Baseline: OT, TT, NH, TX
2015	Break	
2030	Group Analysis	All
2130	Break	
2149	Session 1	Team X: Area A Team Y: Area B
2219		UT left session
2245	Break	
2315	Session 2	Team X: Area B Team Y: Area A
0000	Break	
0010	Disassembly, Allocation for Evidence and Debrief	
0030	Depart	

Team Allocations

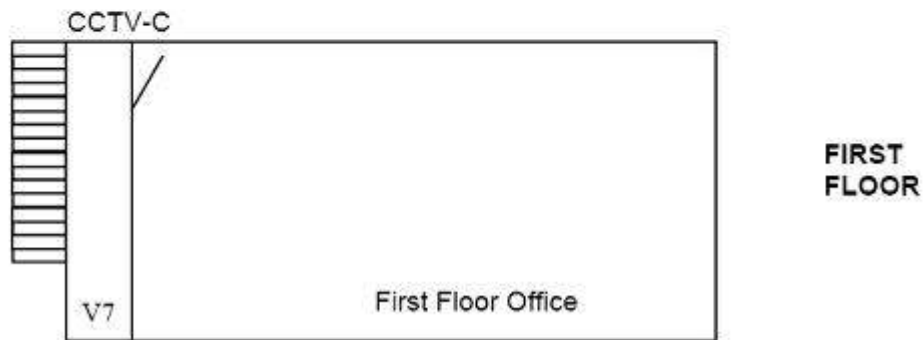
Team X	Team Y	EF Auditors	CCTV Monitors
A (Radio) – TC	A (Radio) – SI	A (Voice R.) –	A (Voice R.) – TX
B (Voice R.) – KI	B (Voice R.) – NH	B (Radio) – EX	B (Radio) – OT
C (Cameras) – UT	C (Cameras) – TT		

Equipment Allocations

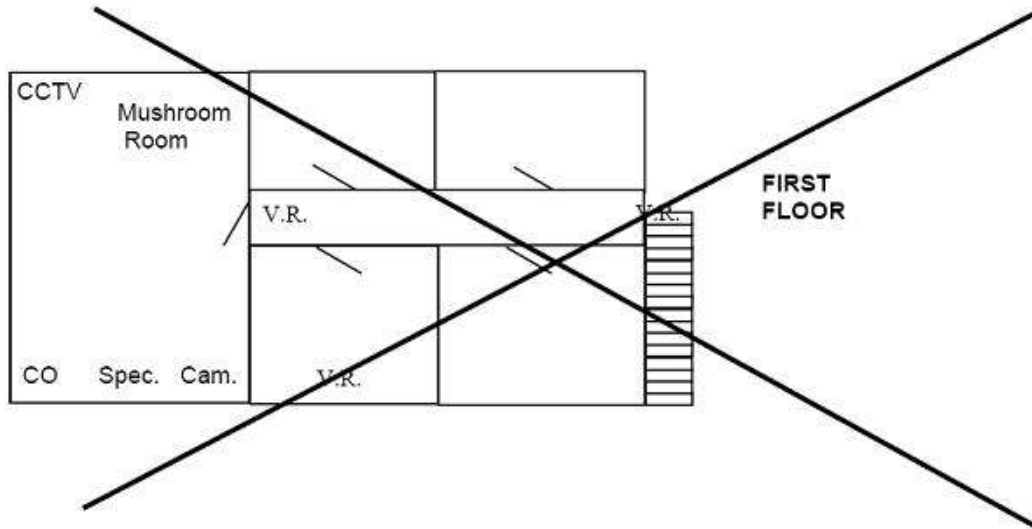
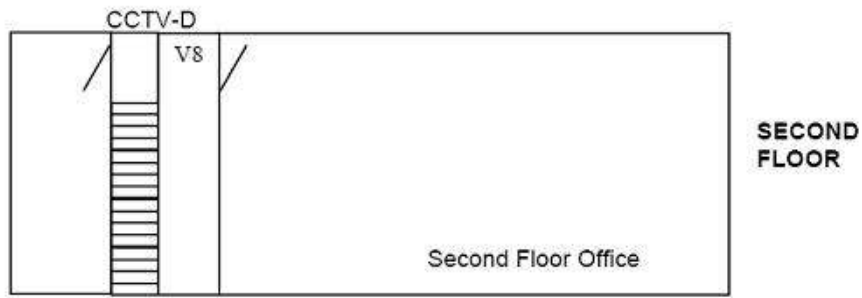
Equipment	Unit	Person	Area	Map Reference
Temperature Loggers	1A	TC /SI	A	
Temperature Loggers	2A	UT/TT	A	
Temperature Loggers	3A	KI/NH	A	
Temperature Loggers	4B	TC/SI	B	
Temperature Loggers	5B	UT /TT	B	
Temperature Loggers	6B	KI /NH	B	
Radio Units	R1	EX	-	-
Radio Units	R2	OT	-	-
Radio Units	R3	SI	-	-
Radio Units	R4	TC	-	-
Voice Recorders	V1	KI	-	-
Voice Recorders	V2	NH	-	-
Voice Recorders	V3	EX	-	-
Voice Recorders	V4	TX	-	-
Voice Recorders	V5	-		
Voice Recorders	V6	-		
Voice Recorders	V7	-		
Voice Recorders	V8	-		
Voice Recorders	V9	-		
Voice Recorders	V10	-		
Voice Recorders	V11	-		
Voice Recorders	V12	-		
Voice Recorders	V13	-		
Voice Recorders	V14	-		
Spectrum Analyser	S1	-		
Spectrum Analyser	S2	-		
CCTV Cameras	CCTV1	-		
CCTV Cameras	CCTV2	-		
CCTV Cameras	CCTV3	-		
CCTV Cameras	CCTV4	-		
Camcorders	NH	-		
Camcorders	EX	-		
Camcorders	TT	-		
Camcorders	TX-T	-		
Camcorders	TX-M	-		

2.11 Floor Plans and Equipment Mapping

Stanton Farmhouse: Renovated side (not to scale)



Stanton Farmhouse: non-renovated side (not to scale)



3.0 Data and Results

3.1 Interview and Secondary Source Data

Interviews took place after the investigation, or transcripts were read for the first time after the investigation to avoid priming. Interview data was included in this section for expediency.

The full interview transcripts were too lengthy to include in this report. An abbreviated format was included below. Interviewee names were removed from the abbreviated list, and reference codes were used for use of reference in the analysis section of this report. This section also contains second-hand evidence, refer to the methodology for more details.

Code	Subject	Status	Frequency	Report
FH1	Miss A	SH	Once	In on first floor experienced the feeling of being watched with a thick, heavy presence to the room.
FH2	Miss B	SH	Occasional	Had heard several accounts of a woman seeming to appear at a first floor window looking in, and then unaccountably disappearing
SH1	Mr A	SH	Occasional	When the house was abandoned we went in there and saw some strange things, including banging on the floor. We would move something from one place and we would come back minutes later and find it moved to another place. We also experienced cold patches and saw outlines of figures.
There were also a number of reports presented about the grounds around the house, which are not presented as these areas were not studied.				

3.2 Extraneous Factors Audit Data

8th November

Extraneous Factors Audit Results

Source	Area	Category	Descriptions
[Initial Audit] Internal 2105	2 nd floor corridor	Visual	There is a luminous fire extinguisher sign underneath window
		Tactile	There is a slight draft coming in through small window.
		Visual	A green light from smoke alarm can be seen and we have a slight green glow in the from the light above the fire exit.
		Visual	As you come to the top of the stairs & turn the left there is a sound like the dragging of a slightly open window coming from the room at the end of the short corridor.
		Visual	There is chipped, cracked and loose paint in the corridor.
		Audio Visual	There are Insects buzzing around the light at the top of the stairs
		Visual	There is a map of Stanton Park at the top of the stairs, to the left, on the wall; light is reflecting off of that.
Internal 21.07	1 st floor corridor	Visual	There is a lot of loose plaster. There is strong draft coming into the corridor.
		Visual	There are some loose wires next to the door.
		Visual	There are some green lights on the motion sensor camera, fire alarm & emergency lighting.

		Visual	The wooden door downstairs has the potential to open as it cannot be secured
		Visual	There are some loose papers on the wall which could be moved by the wind that's coming in through the old window at the bottom of the stairs.
		Audio	There is some movement of the wooden stairs.
		Visual	There are some cables trailing and loose cables.
		Visual	There are cobwebs.
		Audio	Wind, heavy rain and fireworks can all be heard.
		Audio	Team members can be heard around in other rooms too.
Internal 21.18	Fire Room	Visual	Glow from external lights is coming in from the window; it is turning on and off.
		Visual	Red and green lights from the laptop can be seen.
		Visual	There is light coming in from above & the bottom right corner of the bricked up door.
		Audio	The lap top fan is whirring.
		Audio	Wind is whistling in through the window.
		Audio	There is a general sound of electrical hum
		Audio and visual	Rain is dripping down.
		Audio	There is a sound of distant fireworks.
		Audio	There is a dripping noise in the vicinity of the fire place; possibly water dripping down the chimney.

		Visual	There is flaking brickwork, flaking plaster, and also potentially flaking brickwork could come down the chimney.
		Visual	There is also some electrical equipment in the room.
		Visual	A car is parked outside which is possibly giving off a glow which may be perceived by a percipient later on.
		Visual	Could be possible glows given by cars and electrical equipment inside.
		Visual	A rosebush outside the window could possibly touch against the window or brickwork.
Internal	Small room	Visual	A number of red and green lights from the equipment we brought in to the room can be seen.
		Audio	There is a sound of wind and trees from behind and in front of us.
		Visual	Lights are reflecting in from the outside of the building, particularly to the wall that's to the right of the door as you enter the room.
		Visual	There is plaster and loose paintwork that could drop.
		Tactile	There is a slight draft coming from a large hole in wall, to the left of the door as you walk into the room.
		Visual	There are lots of various pieces of equipment stored in here, wood, chairs etc.
		Visual	A security light went off half way through the EFA.

<p>External Audit</p> <p>2123</p>		<p>Visual Audio</p> <p>Visual Audio</p> <p>Visual</p> <p>Not categorised</p> <p>Audio</p> <p>Audio</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Audio</p>	<p>There are fireworks, rain, wind, and lights sensitive to people coming underneath them.</p> <p>There are trees rustling, plants rustling, and water dripping from the side of the building.</p> <p>There are big puddles that people could potentially walk through.</p> <p>The sound of animals is a possibility.</p> <p>Sound of aircraft flying over.</p> <p>Dripping can be heard from the gutters.</p> <p>There is one security light and one light between toilet and door, which is permanently on.</p> <p>There is a security light at the other end of the building.</p> <p>Upstairs there's a light on – 2nd floor.</p> <p>There is a sound of footsteps as we walk around the building.</p>
<p>EFA team External</p>	<p>2207</p>	<p>Audio</p> <p>Visual</p>	<p>Continual sound of fireworks, bangers and things like that in the distance coming from the right as you leave the entrance to the farmhouse.</p> <p>The moon seems to be going behind the clouds a lot as well affecting the ambient light.</p>
<p>EFA team External</p>	<p>2209</p>	<p>Audio</p>	<p>Sound of a heavy plane going over</p>

EFA team	2212	Audio Visual	External door of farmhouse just banged shut
EFA team	2218	Audio	I've just literally swapped cameras in the fire room with the other team so if anyone reported the sounds of footsteps outside; that was me (UT).
EFA team	2225	Audio	Heavy plane flying over
EFA team	2233	Audio	Banging door at front of the farmhouse
EFA team	2235	Audio	Team member banging around with a bag of animal feed
EFA team	2244	Audio	Banging front door again
EFA team	2329	Audio	OT sneezed
EFA team	2349	Audio	Sound of distant fireworks, could quite possibly be what was heard in the small room.

6th December 08**Extraneous Factors Audit Results**

Source	Area	Category	Descriptions
Internal EFA	C	20:26	
	C	Visual	Lights remaining on in this condition.
	C	Visual	There's a window at the end of this corridor, showing outside, lights from potential camera flashes and also from the activated movement lights could activate.
	C	Visual	There's a shiny white board at the top of the stairs; from which light could easily reflect upon.
	C	Visual	There's also a metal key box as well, or fire box, some sort of box, unlikely to cause reflection but could.
	C	Auditory	There's a low whirring electrical generatory type noise going on.
	C	Visual	The main light on the floor, slightly pulses, not excessively but you probably notice it.
	C	Visual	There also an emergency strip light on the wall that's got a green LED on it.
	C	Visual	Smoke alarm/ fire alarm thing has also got a green LED, and a movement sensor next to the door that's got an LED light on it.
	C	Visual	There's loose plaster on the ceiling which could potentially flake down and look like a ghost.
	C	Visual	There are items on the notice board in this corridor which could potentially cause reflection, including drawing pins with metal heads.
	C	Visual	There's wiring being fed over the banister and also down the stairs from this floor, so if someone was to kick or move that (which hopefully they wont) as they are coming or going from the building, that could create movement of the wire on this floor.
	C	Visual	Similarly, the upstairs light which shines down on to this floor similarly pulses and flickers like the light on the 1 st floor.

	C	Visual	The floor is reinforced with metal studs which could give a sparkly, glittery effect.
	C	Visual	There's a stack of in trays in the window at the end of this corridor, which could potentially have shiny bits on them.
	C	Visual	There's luminous glow in the dark sign by fire extinguisher at the end of this corridor before the stairs going to the top floor.
	D		End of base line in this area.
	D		20:30 EFA Top floor corridor/ Landing.
	D	Auditory	Floorboards are creaking in the little alcove which is to the left as you get to the top of the stairs, specially when they are resettling.
	D	Visual	Flaky plaster everywhere and obviously this flooring is also sparkly.
	D	Visual	The wall paint itself is quite shiny and reflective; there's also a ceiling light here and a smoke alarm with a green LED, and an emergency strip light thing with a green LED.
	D	Visual	There's gaps under the doors and also in the flooring on ground level here which could lead to a lot of spider type movement.
	D	Visual	There's cobwebs in the alcoves, perhaps where a next of spiders are living.
	D	Auditory	Electrical type sound from the generator type thing is very evident up here. End of top floor baseline, now moving into the derelict part of the building.
	A	20.35	
	A	Visual	Spectrum analyser which is plugged into the laptop makes whirring noises as the battery goes up and down.
	A	Visual	There's also 2 static LED green lights on the lap top as well as flickering red and green LED lights on the laptop.
	A	Visual	There's a further green LED laptop on the floor.
	A	Visual	All of these are situated next to the window.
	A	Visual	There's a red LED light on the voice recorder, there's also the red glow of the infrared on the CCTV camera.

A	Visual	There's light coming in from the corner where the stairs used to be by the window which is now bricked up; there's light at the top and the bottom.
A	Visual	There's also 2, there's a big window and a little window which also let some light in and reflect light from outside which has already been mentioned in the EFA for outside.
A	Visual	There's several wires hanging from the ceiling which could look quite effective in photos.
A	Visual	The ceiling is generally missing the plaster for all the boards above, so general dislocation of dust and bits; something that might fall on people, and spiders, nests of spiders! Possibly rodents and insects in the floors and above us.
A	Auditory	I also just heard a tapping noise from the corner, not sure what that was caused by.
A	Visual	Voices from other areas of the site carry very easily into this room, as do footsteps both outside on the gravel and elsewhere in the building.
A	Visual	The open doorway allows light into this room from outside and also the other room.
A	Visual	The tri pod legs are possibly reflective.
A	Visual	There are plants outside the window which obviously could cause some sort of shadow movement and also animals could climb up it or scamper past it an NB: window sticker in fire room
A	Visual	There's a voice recorder on the shelf outside the fire room. The voice recorder has got a red LED which would be visible from the fire room. It could look a bit spooky.
B	20:40	.
B	Visual	Light coming in from the window and obviously the light changes as mentioned in the outside EFA will come in through this window as well.
B	Visual	Light from the fire room can also come through to the small room.

Investigation Evidence	B	Visual	The spectrum analyser and laptop have 2 green LED lights, 1 flashing red light and there's a big strip light suspended from the ceiling; apart 4-5 foot in length.
	B	Visual	There's the infrared glow from the CCTV camera which is visible.
	B	Visual	This room was used for general storage so there's probably of dust disruption and unknown items in here.
	B	Visual	Initially this room feels colder than the other room (A) on the other side of the building; there is a whole in the wall however.
	B	Visual	There's a voice recorder with a red LED light stuck on the window sill in this room.
	B	Visual	The floor is dusty in this room, so scuffing your feet could create effects.
	B	Visual	There's a window sticker on the window on here.
	B	Visual	There's a beam going across the room, from the front of the room to the back of the room; which allows light to travel across it, which makes it look lighter from the front due to the window and the beam being able to carry the light back.
	B	Visual	As mentioned in the fore room, (A) sound carries very easily; although probably less so than in area A but you can hear traffic in the distance; and potential to hear voices from the main building.
	A team X		Session 1
	A		21:32 Slight sound from NH shaking his torch.
	A		21:41 More NH shaking his torch in another room.
	A		21:43 TC. 10-15 seconds ago, I heard a noise from behind me. I'm sitting with my back to the window. It was like a kind of knock or something being dropped on wood.
A		21:47 TC: Temperature has got so low in	

		<p>this room, you can actually start to see your breath now....Extraneous factor.</p>
	A	<p>21:48 All 3 of us have heard the sound of an owl.</p>
	A A	<p>21:52 TC. Hearing lots of squeaking from animals outside & also where the top of the stairs used to be there's a landing bit & I'm drawn to that as if someone is watching from there; just a small person, or it could be a cat.</p>
	A	<p>22:00 KI: An impression of a lady in a blue satin dress, dressed as though she's been out for the evening; looking very upset, distraught, coming in through the front door, walking along the corridor, looking in the room that we are in, the fire room, looking around her and just walking straight into the other room, as if she doesn't live here but she expects to see people here, and they're not here.</p>
	A	<p>22:01 DP is trying to take flash but camera doesn't seem to want to go off at moment.</p>
	A	<p>22:01 Camera battery is quite low and it so very cold in the room; temperature has dropped considerably over the evening.</p>
	A A	<p>22:02 Just had the camera flash.</p>
	A	<p>22:14 KI: A sound from the right hand side of the fireplace, behind the fireplace in the corner, there was something knocking; toilet flushing I believe.</p>
	A	<p>22:16 TC: I just had a really weird sensation like the floor was tilting, my back to the window & it's my left side; it just felt my back was tilting over that way, but it could just be because I'm very tired.</p>
	A	<p>22:17 DP: Sounded like a creak or drop of plastic coming from upstairs. TC heard it too. KI didn't hear it.</p>
	A A	<p>22:18 KI: I'm feeling quite warm just on my right side. DP: Another tap from upstairs, from the same place as before. Sarah thought it came from by the stairs, or where they used to be.</p>
	B Team X	<p>22:21 End of session.</p>

B	22:45 CCTV camera is flashing on and off.
B	22:46 KI just sneezed.
B	22:46 UT has just joined us, coming to check on the CCTV camera.
B	22:48 We can hear lots of chattering from the other room.
B	22:53 All 3 of us think the temperature in the room has gone up slightly.
B	22:55 We believe that the atmosphere in here is really comfortable.
B	23:01 KI: The same impression as on the last visit: I'm sitting in the open air on a raised platform; lush green grass everywhere in the open air; either this part of the building was added later, or something happened to this part of the building.
B	23:03 DP: Just heard a knock or bang from top right hand corner of the room, opposite the door, Sarah heard it as well; and again – definitely upstairs or something above us; sound like wood expanding almost, or contracting.
B	23:04 All: just heard the bang or the creak again from above us.
B	23:06 All: just heard the creak above us again.
B	23:07 All: Slightly louder knock or creak, and it was more central towards the middle of the ceiling, it wasn't so far behind us; it was more probably towards the front of us but in the centre of the room.
B	23:13 KI: A very cold draft coming from the door to my left.
B	23:17 KI: Sound of bells outside.
B	23:30 CCTV camera is switching on and off again.
B	23:32 All: and another creak in the roof upstairs.
B	23:33: All: We've got the sounds of distant traffic.

	<p>B Team Y</p> <p>B</p> <p>B</p> <p>B</p> <p>A Team Y</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p>		<p>21:43 TT: I just heard what sounded like a jet aeroplane going overhead. SI: I also heard it NH: I heard something, a strange sound; don't know if it was a plane or what, it was a bit odd, spooky!</p> <p>21:46 TT: UT has just come in the door into the room next door and the security light has come on as he did so. NH: I confirm.</p> <p>End of Session</p> <p>22:47 TT: just heard a knock coming from between SI and NG on the floor. It might have been someone's chair. NH: I heard a knock; I don't know where it came from; I don't think it was the chair. SI: I think it was the chair.</p> <p>22:49 TT: I thought the security light just went on again outside, but it's possible that NH thinks it was on all the time, and it hasn't just gone on again.</p> <p>23:06 TT: just heard a creaking or a tap, seemed to come from my right hand side near the little window in the corridor.</p> <p>23:14 NH: Just heard a creak by the window; it could be the EMF meter, but it could be the unknown!</p> <p>23:15 TT: Just heard some kind of shriek coming from outside; don't know if it was a bird or some kind of animal squealing. SI: I also heard the high pitched call and noises.</p> <p>23:16 NH: I heard what sounded like an owl in the distance.</p> <p>23:17 TT: We can continually, repeatedly hear the sound of an owl and the shrieking of the other animal having a conversation outside. NH: I concur. SI: I can also hear the animals and also I can</p>
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			faintly hear the conversation going on in the CCTV room.
	A		23:31 SI: I just heard a creak that sounded like it was coming from above the small room.
	A		23:33 NH: I thought I heard a knocking noise, coming from behind me.
	A		23:38 NH: The knocking noise from behind me again; it could be coming from the kitchen, but it's very quiet otherwise; it's the occasional quite loud knock or bang.
	A		23:39 TT: I heard the knock that NH just referred to. SI: I've also been hearing it too.
			End of session

3rd January 09**Extraneous Factors Audit Results**

Source	Area	Category	Descriptions
EF Auditors	Back of building	Auditory	22:18 Birds in trees creating rustling sound
EF Auditors	Percipient areas	Visual	22:48 Flash – no cameras but team member waving torch around
EF Auditors	Outside	Auditory	22:48 Possible bird (owl) noises
EF Auditors	Outside	Auditory	23:17 Sounds of motorbikes
EF Auditors	Courtyard	Auditory & Visual	23:56 Report of movement and lights. No security lights on outside and no indication of lights
EF Auditors	Trees near barn	Visual	00:05 Report of lights in trees. Subtle lights in trees but no obvious cause
EF Auditors	Back of building	Auditory	00:14 Team reported sound of running water reported. EFA heard what sounded like footsteps walking.

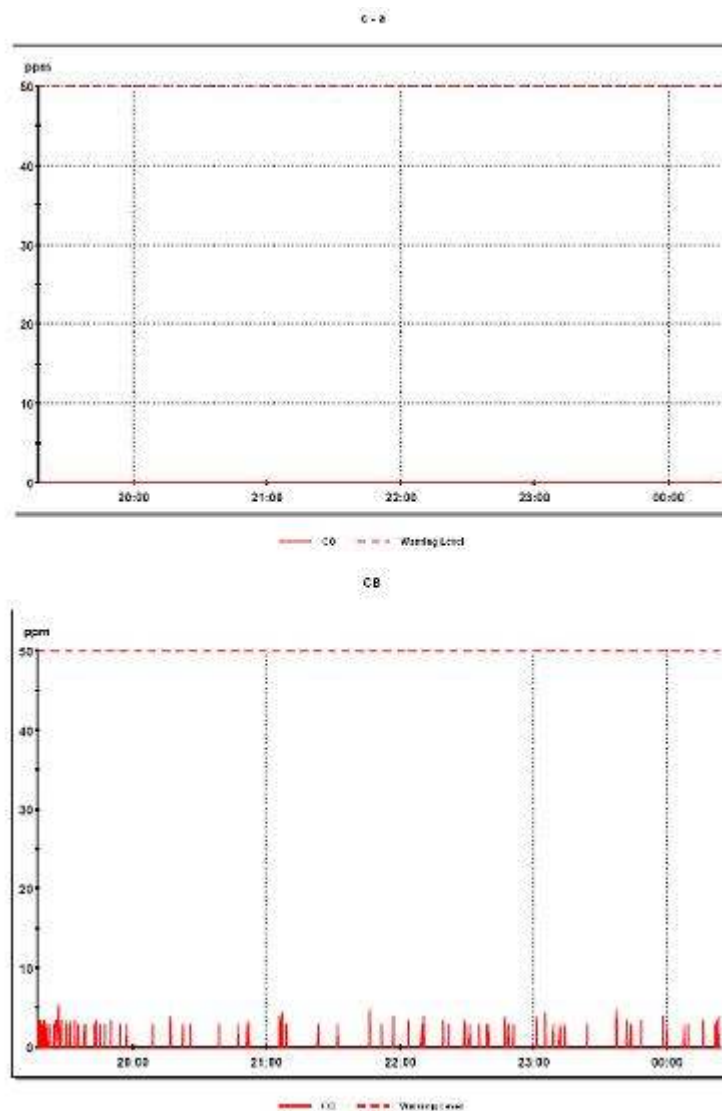
3.3 Investigation 1: Logger Monitoring Report

Room A = 'Fire room'
Room B = 'Small room'

The designated monitoring period was between 19:17 and 00:24. Extreme temperature readings (-200 and 80 C) relating to the setting up and removal of the probes have been removed.

Carbon Monoxide (CO) Detectors

The carbon monoxide detector in **Room A** did not detect any carbon monoxide throughout the monitoring period; the detector in **Room B** intermittently detected very low levels of carbon monoxide with a maximum reading of 5.5 ppm at 19:26.

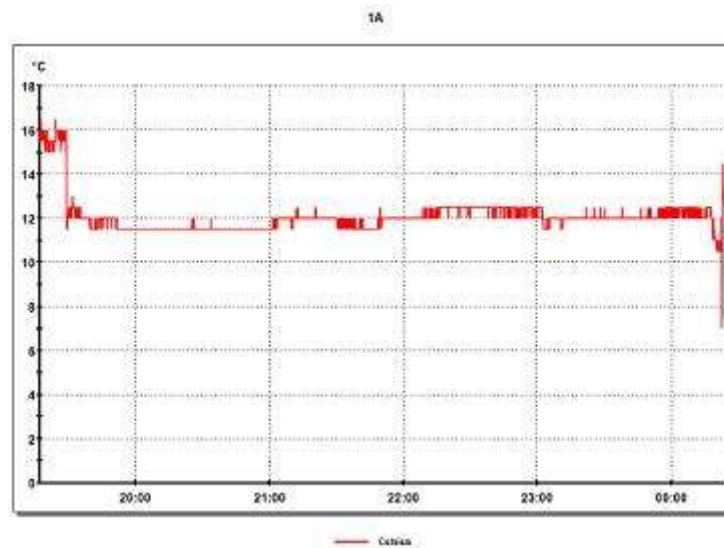


Temperature

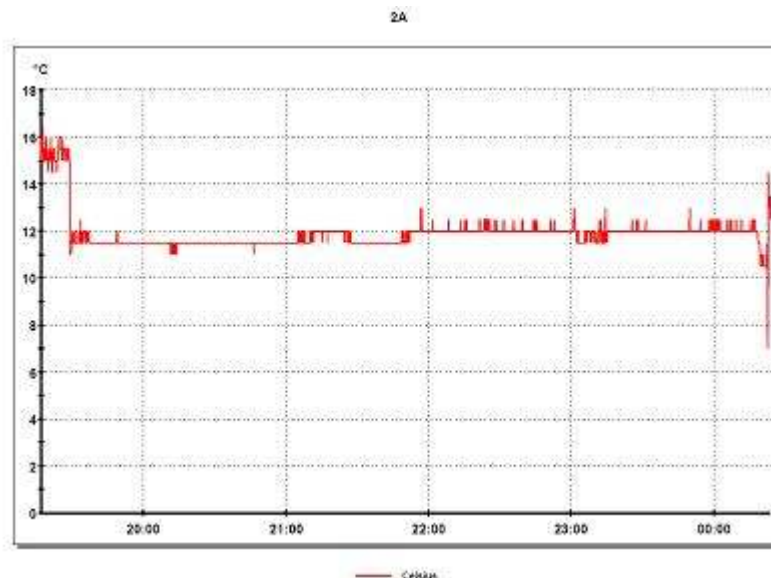
Many of the temperature fluctuations may be due to people entering and leaving the rooms and external doors being opened and closed. There may also be temperature fluctuations trends as a result of the loggers being moved from the location in which they were set up to their designated positions. Without the specific times of when the loggers were set up and when participant sessions started and finished it is not possible to comment on this any further.

Room A

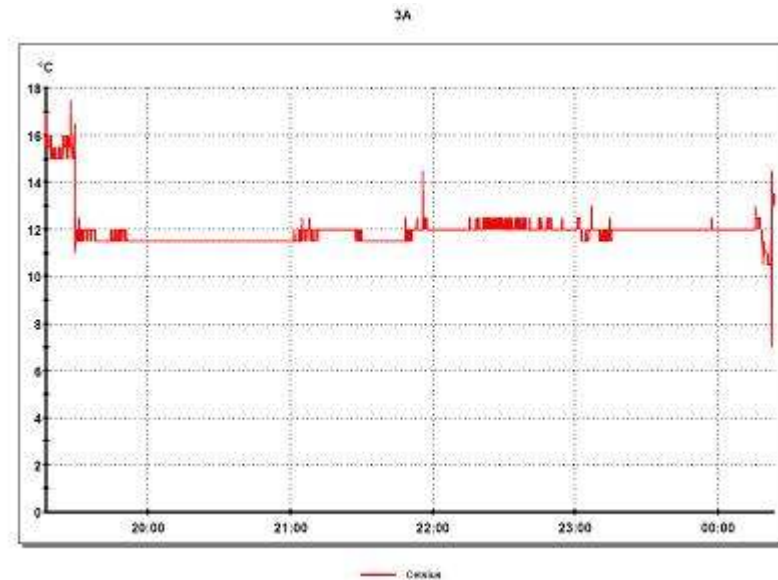
Loggers **1-3A** generally follow roughly similar temperature fluctuation trends overall.



Logger **1A** recorded a minimum temperature of 7.0 C at 00:22:42 and a maximum temperature of 16.5 C at 19:17:44. Between 19:17 and 19:51 the temperature reading generally falls from 16.5 to 11.5 C. From this point the temperature fluctuations are no more than 0.5 until 00:22, when the temperature begins to drop from 10.5-11.5 C, until it reaches 7.0 C and then goes back up to 13.5 C at 00:24 (relates to the logger being packed away).



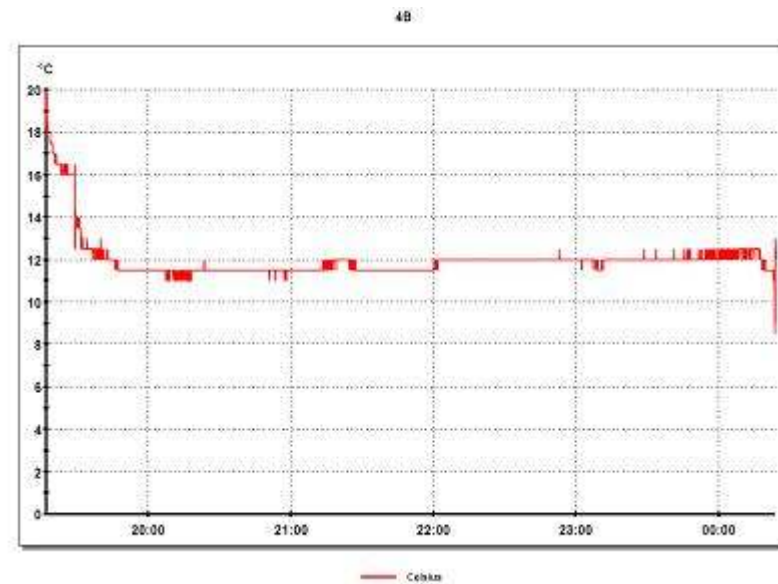
Logger **2A** recorded a minimum temperature of 7.0 C at 00:22:30 and a maximum temperature of 16.5 C at 19:17:49. Between 19:17 and 19:37 the temperature reading generally falls from 15.5-16.0 to 11.5 C. From this point the temperature fluctuations are no more than 0.5-1.0 C until 00:18 when the temperature begins to drop from 12.0 C until it reaches 7.0 C and then goes back up to 14.5 C at 00:22 (relates to the logger being packed away).



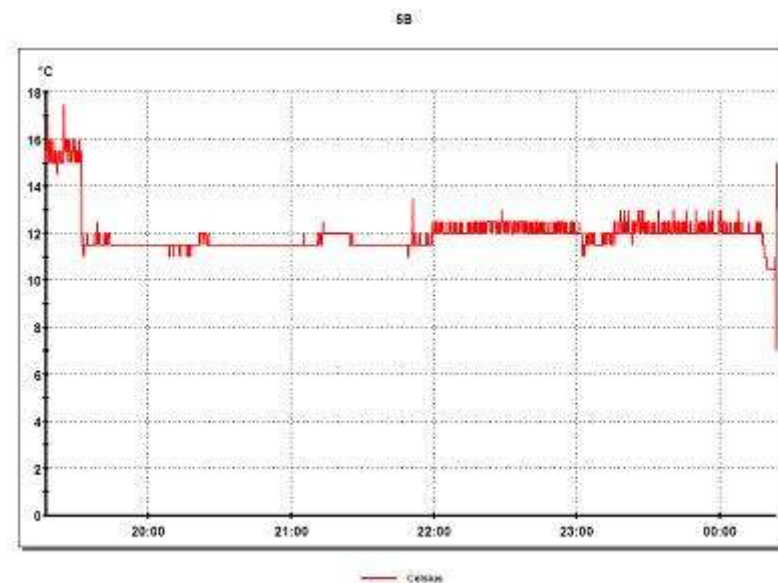
Logger **3A** recorded a minimum temperature of 7.0 C at 00:22:31 and a maximum temperature of 17.5 C at 19:27:26. Between 19:17 and 19:37 the temperature reading generally falls from 17.0 to 11.5 C. From this point the temperature fluctuations are no more than 0.5-1.0 C until 00:17 when the temperature begins to drop from 12.5 C until it reaches 7.0 C and then goes back up to 14.5 C at 00:22 ((relates to the logger being packed away). There is one noticeable 'spike' within the range where the temperature increases from 12.0 C at 21:55:36 to 14.5 C in 2 seconds and then decreases to 12.0 C at 21:55:49.

Room B

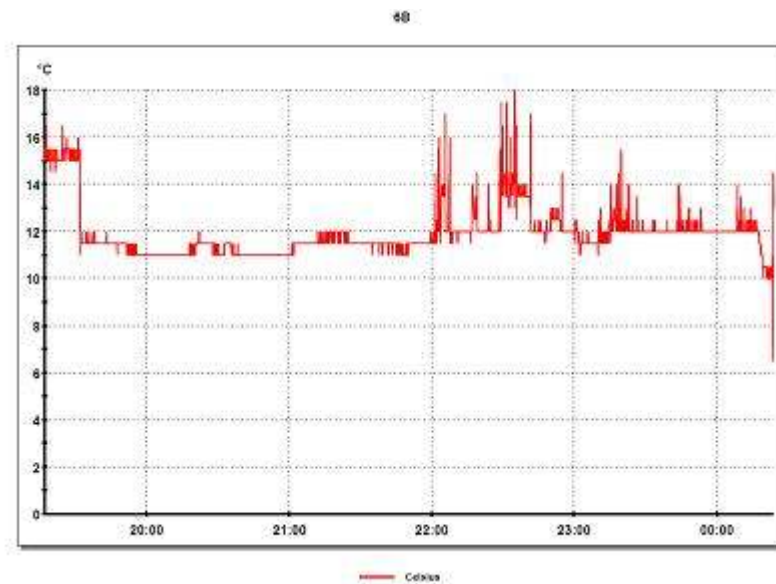
Loggers 4-6B generally follow roughly similar temperature fluctuation trends overall although logger 6B fluctuates a lot between 22:00 and just before midnight; the variance in temperature for loggers 4 and 5 is much smaller during this time period.



Logger **4B** recorded a minimum temperature of 8.5 C at 00:22:37 and a maximum temperature of 20.00 C at 19:17:00. Between 19:17 and 19:47 the temperature reading generally falls from 20.0 to 11.5 C. From this point the temperature fluctuations are no more than 0.5 until 00:18 when the temperature begins to drop from 11.5 C until it reaches 8.5 C and then goes back up to 13.0 C at 00:23 (relates to the logger being packed away).



Logger **5B** (above) recorded a minimum temperature of 7.0 C at 00:23:30 and a maximum temperature of 17.5 C at 19:24:37. Between 19:17 and 19:47 the temperature reading generally falls from 15.5-16.0 to 11.5 C. From this point the temperature fluctuations are no more than 0.5-1.0 C until 00:18 when the temperature begins to drop from 12.0 C until it reaches 7.0 C and then goes back up to 14.5 C at 00:22 (relates to the logger being packed away). There is one noticeable single 'spike' within the range where the temperature increases from 11.5 C at 21:51:01 to 13.0 C in 3 seconds and then decreases to 11.5 C at 21:51:20.



Logger **6B** recorded a minimum temperature of 6.5 C at 00:23:35 and a maximum temperature of 18.0 C at 22:34:52. Between 19:17 and 19:32 the temperature reading generally falls from 15.5-16.5 to 11.5 C. From this point until about 22:00 the temperature fluctuations are no more than 0.5-1.0 C but there are 5 main 'spikes' between 22:00 and 23:00 and 2-3 spikes between 23:00 and 00:00. At 00:23:35 the temperature jumps from 6.5 C until it reaches 14.0 C at 00:32:41 ((relates to the logger being packed away).

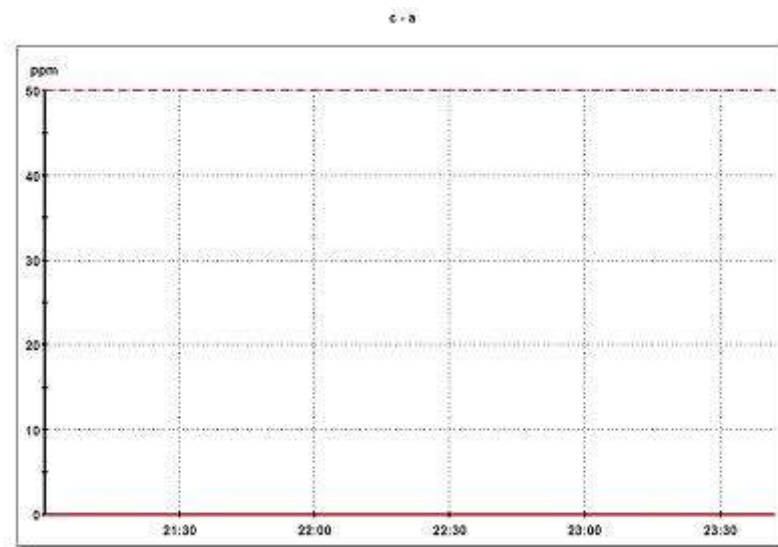
3.4 Investigation 2: Logger Monitoring Report

Room A = 'Fire room'
Room B = 'Small room'

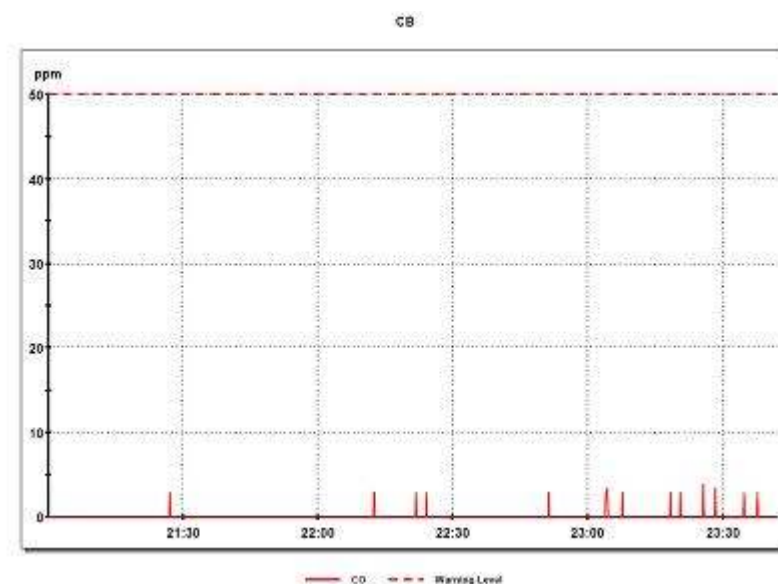
The designated monitoring period was between 21:00 and 23:42. Extreme temperature readings relating to the setting up and removal of the probes have been removed.

Carbon Monoxide (CO) Detectors

The carbon monoxide detector in Room A did not detect any carbon monoxide throughout the monitoring period; the detector in Room B intermittently detected very low levels of carbon monoxide with a maximum reading of 4.0 ppm at 23:25:38.



From:- 06 December 2008 21:00:06 To:- 06 December 2008 23:42:06



From:- 06 December 2008 21:00:08 To:- 06 December 2008 23:42:08

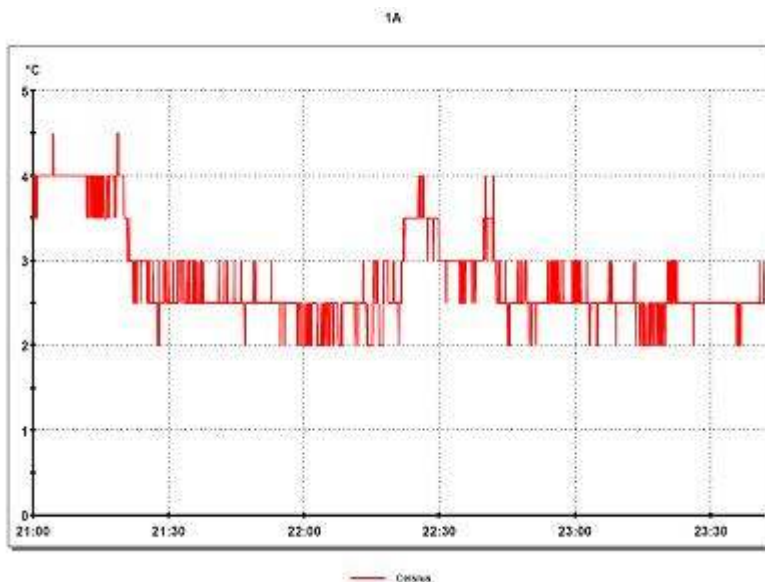
Temperature

Many of the temperature fluctuations may be due to people entering and leaving the rooms and external doors being opened and closed. There may also be temperature fluctuations trends as a result of the loggers being moved from the location in which they were set up to their designated positions or experients accidentally touching the probes.

Without the specific times of when the loggers were set up and when participant sessions started and finished it is not possible to comment on this any further.

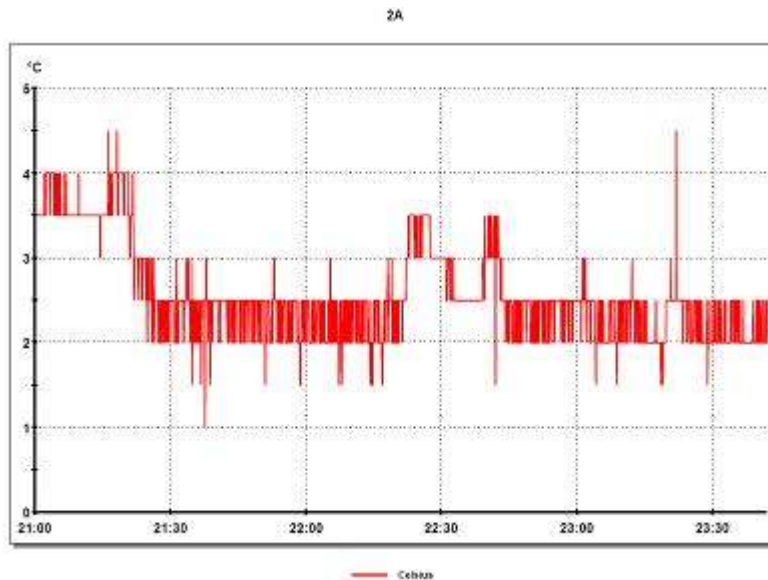
Room A

Loggers **1-3A** generally follow roughly similar temperature fluctuation trends overall.



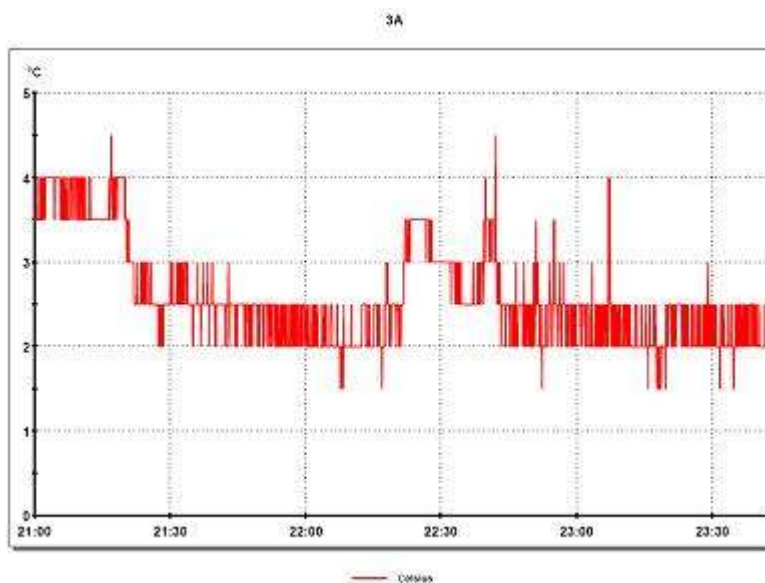
From:- 06 December 2008 21:00:00 To:- 06 December 2008 23:42:00

Logger **1A** recorded a minimum temperature of 2.0 C at 21:27:38 and a maximum temperature of 4.5 C at 21:18:57. Although the temperature trace shows some general trends up and down over time, these are most likely due to experients moving in or out of the room and seem to occur at roughly 60 minute intervals, which is the length of the experient sessions. There are no instantaneous temperature changes of more than 0.5 C either way.



From:- 06 December 2008 21:00:00 To:- 06 December 2008 23:42:00

Logger **2A** recorded a minimum temperature of 1.0 C at 21:37:42 and a maximum temperature of 4.5 C at 21:16:21. From 22:41:46 until 22:41:57 the temperature drops from 3.5 C to 1.5 C and then goes back up to 3.5 C at 22:42:05. At 23:21:47 the temperature increases from 2.5 C to 4.5 C at 23:21:49 and then returns to 2.5 C at 23:21:55. These might be caused by an experient accidentally touching the temperature probes.

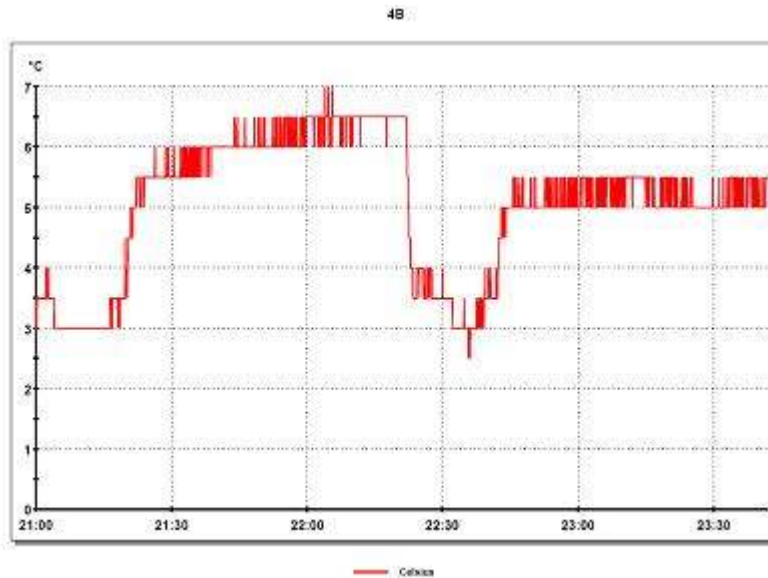


From:- 06 December 2008 21:00:00 To:- 06 December 2008 23:42:00

Logger **3A** recorded a minimum temperature of 1.5 C at 22:07:41 and a maximum temperature of 4.5 C at 21:17:00. At 22:41:41 the temperature drops from 3.5 to 3.0 C and then rises to 4.5 C at 22:41:52 and then drops back to 3.5 C at 22:41:59. At 23:06, the temperature jumps from 2.0 to 4.0 C in the space of 1 second then gradually drops to 2.5 C at 23:07:01 then gradually rises to 4.0 C at 23:07:17 before gradually dropping to 2.0 C again at 23:07:31.

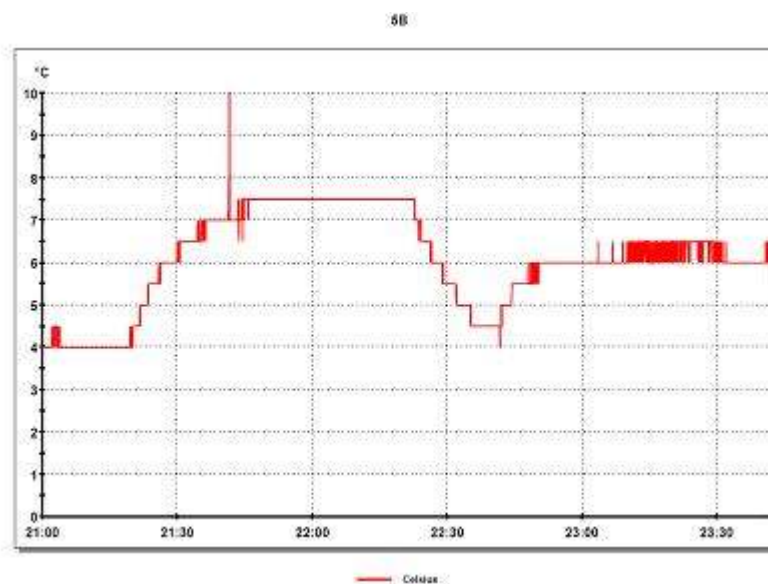
Room B

Loggers **4-6B** generally follow roughly similar temperature fluctuation trends overall although there are unique spikes shown in dataloggers 5B and 6B on two occasions. Although the temperature trace shows some general trends up and down over time, these are most likely due to experients moving in or out of the room and seem to occur at roughly 60 minute intervals, which is the length of the experient sessions.



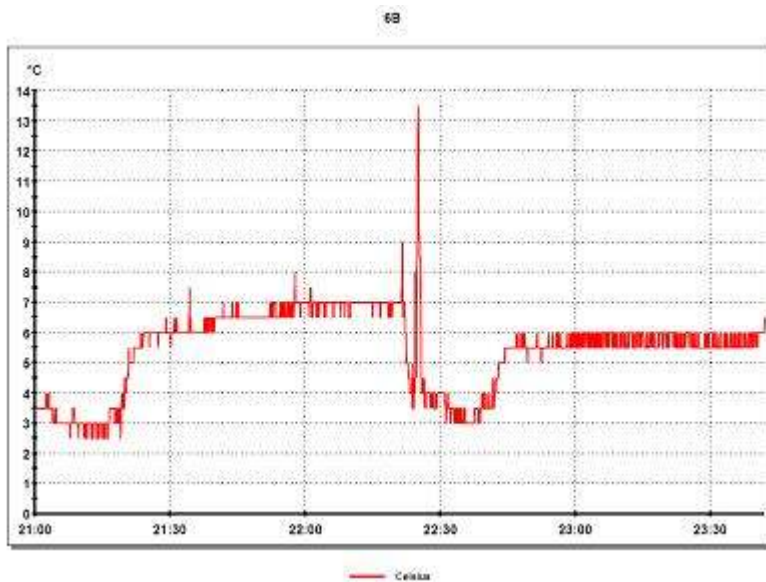
From:- 06 December 2008 21:00:00 To:- 06 December 2008 23:42:00

Logger **4B** recorded a minimum temperature of 2.5 C at 22:35:43 and a maximum temperature of 7.0 C at 22:04:00. There are no instantaneous temperature changes of more than 0.5 C either way.



From:- 06 December 2008 21:00:00 To:- 06 December 2008 23:42:00

Logger **5B** recorded a minimum temperature of 4.0 C at 21:00:00 and a maximum temperature of 10.0 C at 21:41:37. At 21:41:30, the temperature jumps rises from 7 to 8 C in the space of a second, then drops back to 7 C in another second. At 21:41:36, the temperature rises sharply from 7.5 to 10 C in a second and then drops to 8.5 in another second before gradually falling to 7 C again at 21:41:42. These might be caused by an experient accidentally touching the temperature probe.



From:- 06 December 2008 21:00:00 To:- 06 December 2008 23:42:00

Logger **6B** recorded a minimum temperature of 2.5 C at 21:08:00 and a maximum temperature of 13.5 C at 22:25:03. At 21:34:22, the temperature rises from 6.5 to 7.5 C in the space of two seconds and then drops to 6.5 C in the same time period. At 21:57:47, the temperature rises from 7 to 8 C in the space of two seconds and then drops gradually back to 7 C at 21:57:55. At 22:21:32, the temperature rises from 7 to 8 C in the space of two seconds and then up to 9 C at 22:21:38 and then gradually drops back to 6.5 C at 22:21:46. At 22:24:25, the temperature recorded rises from 5.5 to 8 in the space of a second and then gradually drops down to 4.5 C at 22:24:38; then it gradually increases to 8 C at 22:24:48. Shortly afterwards at 22:24:55, the temperature rises from 8.5 to 11 C in the space of two seconds then gradually increases to 13.5 C at 22:25:03 before gradually dropping to 8.5 C at 22:25:25 and then to 4.5 at 22:25:50. It is possible that this corresponds with the movement of experients from the room.

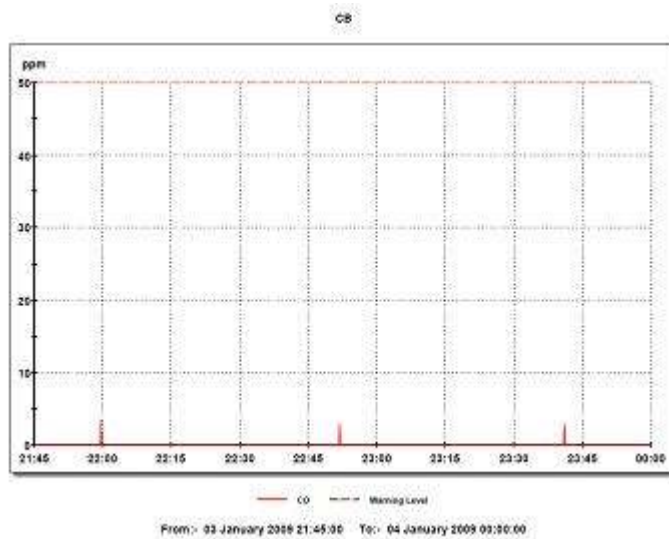
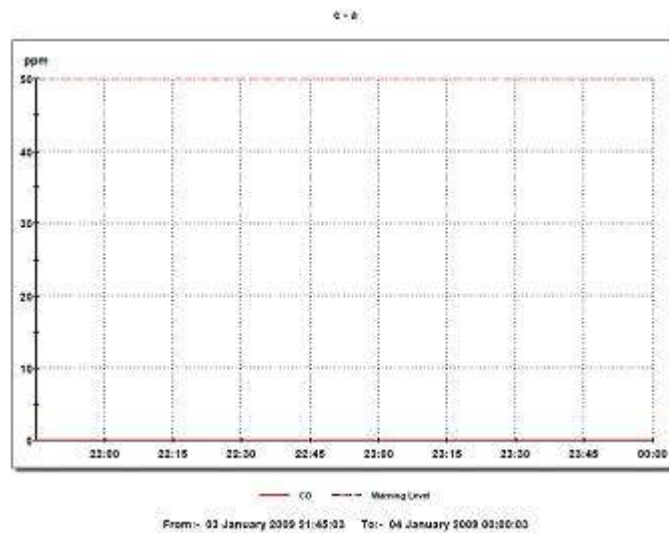
3.5 Investigation 3: Logger Monitoring Report

Room A = 'Fire room'
Room B = 'Small room'

The designated monitoring period was between 21:45 and 00:00. Extreme temperature readings relating to the setting up and removal of the probes have been removed.

Carbon Monoxide (CO) Detectors

The carbon monoxide detector in **Room A** did not detect any carbon monoxide throughout the monitoring period; the detector in **Room B** intermittently detected very low levels of carbon monoxide with a maximum reading of 3.5ppm at 21:59:40.



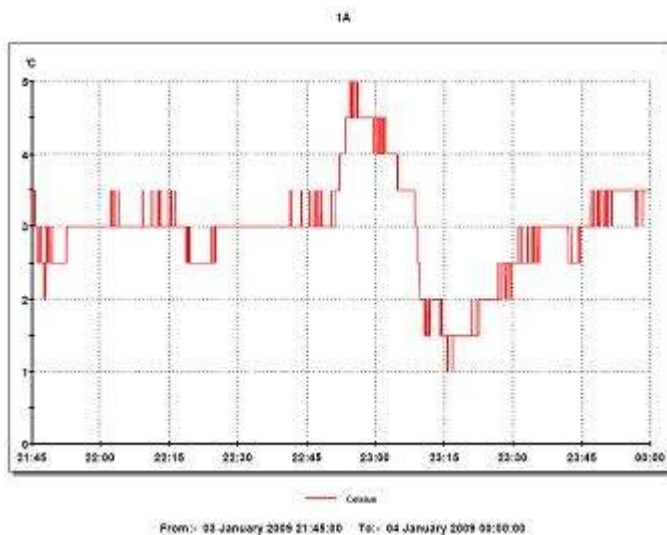
Temperature

Many of the temperature fluctuations may be due to people entering and leaving the rooms and external doors being opened and closed. There may also be temperature fluctuations trends as a result of the loggers being moved from the location in which they were set up to their designated positions or experients accidentally touching the probes.

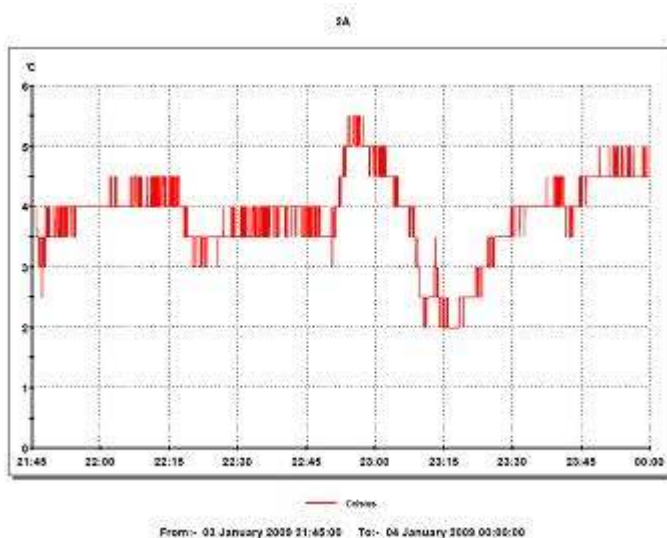
Without the specific times of when participant sessions started and finished it is not possible to comment on this any further.

Room A

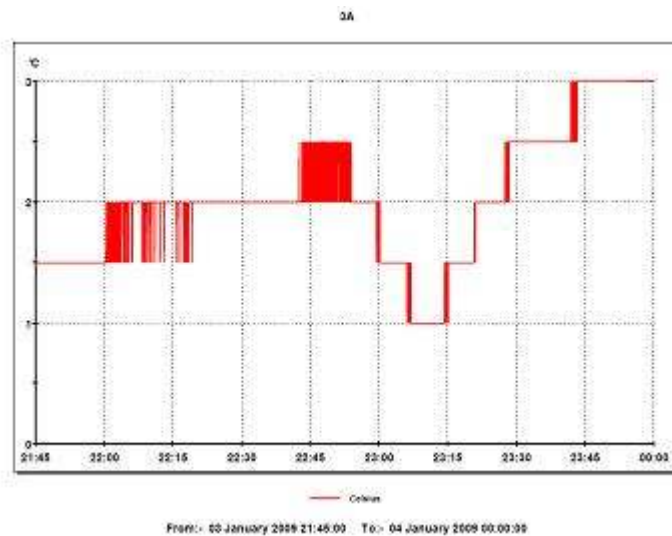
Loggers **1-3A** generally follow roughly similar temperature fluctuation trends overall. Although the temperature trace shows some general trends up and down over time, these are most likely due to experients moving in or out of the room and seem to occur at roughly 60 minute intervals, which is the length of the experient sessions.



Logger **1A** recorded a minimum temperature of 1.0 C at 23:15:42 and a maximum temperature of 5.0 C at 22:54:30. There are no instantaneous temperature changes of more than 0.5 C either way.



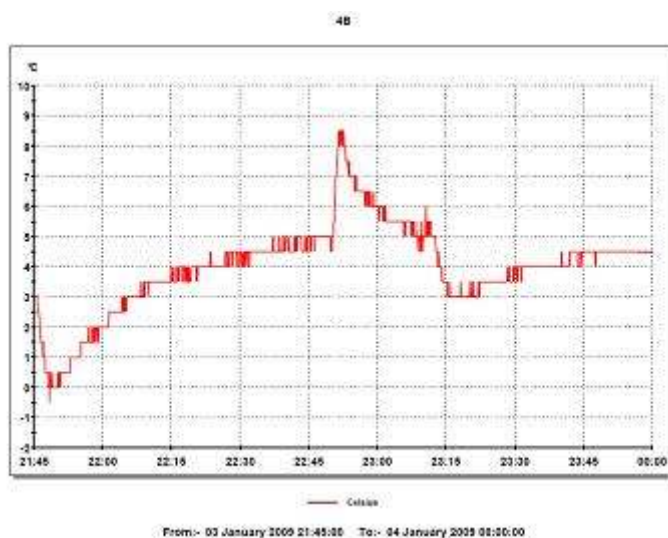
Logger **2A** recorded a minimum temperature of 2.0 C at 23:10:37 and a maximum temperature of 5.5 C at 22:54:08. There are no instantaneous temperature changes of more than 0.5 C either way.



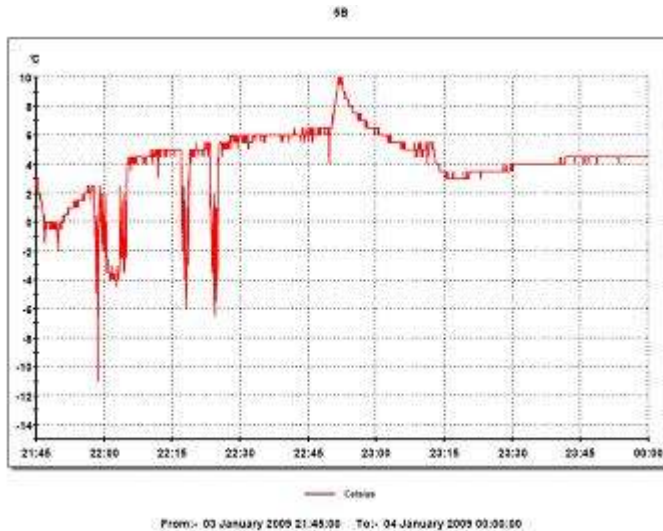
Logger **3A** recorded a minimum temperature of 1.0 C at 23:06:09 and a maximum temperature of 3.0 C at 23:41:52. There are no instantaneous temperature changes of more than 0.5 C either way.

Room B

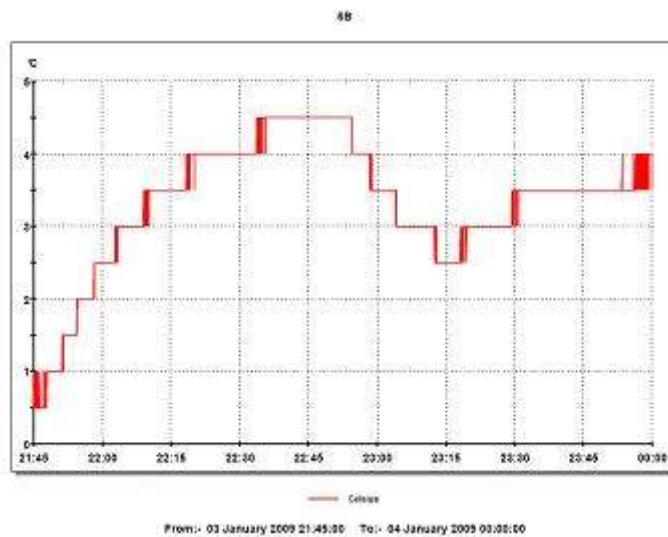
Loggers **4-6B** generally follow roughly similar temperature fluctuation trends overall, although there are large downward unique spikes shown in datalogger 5B on four occasions throughout the first experient session. Although the temperature trace shows some general trends up and down over time, these are most likely due to experients moving in or out of the room and seem to occur at roughly 60 minute intervals, which is the length of the experient sessions.



Logger **4B** recorded a minimum temperature of -0.5 C at 21:48:23 and a maximum temperature of 8.5 C at 22:53:01. There are no instantaneous temperature changes of more than 0.5 C either way.



Logger **5B** recorded a minimum temperature of -11.0 C at 21:58:51 and a maximum temperature of 10.0 C at 22:51:43. At 21:46:59, the temperature drops from 0 to -1.5 C in the space of a second, then fluctuates between -1 and -0.5 before going back up to 0 at 21:47:11. At 21:49:58, the temperature drops from -0.5 to -1.5 C in the space of a second, then fluctuates between -1 and -2.0 before going back up to -0.5 at 21:50:10. Between 21:58:02 and 21:59:05 there are large fluctuations from 0 down as far as -11 and then back up to 2.5 C with one-second changes as large as 4.5 C at times. At 21:59:23 the temperature suddenly rises from 0 to 1.5 C and back again in the space of two seconds then fluctuates down to -1.5 before rising back to 2.0 C at 21:59:41. The temperature then drops down to -4.0 at 22:01:20 and between 22:03:25 and 22:03:28 rises up to 2.5 C, then drops to -2.5 at 22:03:44, then up to 1.5 at 22:04:05, then down to -3.5 at 22:04:27 then back to 2 at 22:04:35 then down to -3.0 at 22:04:37 then back up to 4.0 at 22:05:11. From 22:17:02 to 22:17:07 the temperature drops to 1.0 C then increases to 4 C in one second then drops to -0.5 in one second then goes up to 2.5 in one second before dropping to -0.5 C. The temperature then drops further to -6.0 C at 22:18:15 then back up to 0 at 22:18:23. It then drops to -3.0 at 22:18:32 before going back up to 3 at 22:18:39. One second later it drops to -0.5 then moves gradually up to 5 at 22:18:59. At 22:23:24, the temperature drops from 5.5 C down to -3.5 at 22:23:59. It then fluctuates up and down until it goes back to 5.5 C at 22:25:29. At 22:49:40 the temperature drops from 5.5 to 4.0 C in one second. If these fluctuations are not reported by the experients then it's possible that these are due to the temperature probe accidentally being touched.



Logger **6B** recorded a minimum temperature of 0.5 C at 21:45:04 and a maximum temperature of 4.5 C at 22:33:40. There are no instantaneous temperature changes of more than 0.5 C either way.

3.6 Spectrum Analyser Report

8th November 2008

Spectrum Analyser 's-a' showed some minor disturbances up to 20 Hz, tiny disturbances around 1-2 Hz, and significant disturbance across all frequencies at 19:40:31.

Spectrum Analyser 's-b' results show that the frequency range dropped during this session from disturbances up to 10 Hz at the start (19:59) to nearer 5 from around 20:30 by the end. There is a significant disturbance across all frequencies at 20:27:28.

6th December 2008

Spectrum Analyser 'SA1' registered nothing of interest.

Spectrum analyser 'SA2' registered nothing of interest.

3rd January 2009-02-03

Spectrum Analyser 'SB1' registered nothing of interest.

Spectrum Analyser 'SA2' registered some minor disturbances up to 10 Hz with tiny irregular pulses around 1 Hz.

Analysis

The results show that nothing of interest occurred during the three investigations. The comments on individual analyses refer to tiny extremely small changes in fields over periods too long to qualify as Experience Inducing Fields (EIFs). The two 'significant disturbance across all frequencies' results on the first investigation were too short and had too large a frequency range to demonstrate a real change in the ambient field. This may be due to glitches in the sensor.

Overall no major disturbances or irregular field variations occurred, and the fields seen in the live recordings on the three investigations were very stable and unremarkable in nature.

3.7 Experiences by Classification

The following tables presents a combined summary of the categories of experience across the three occasions of the investigation.

Each report was divided into one of six classifications (visual, tactile, etc) based on the objective classifications outlined in the methodology. Each experience was, separately, sorted into Categories A to D as well as Extra Sensory Impression (ESI).

Section 4.0 outlines the rationale for the classifications.

Report Type	Cat A	Cat B	Cat C	Cat D	ESI	Total	Proportion
Visual	12	11	0	4		27	15%
Tactile	0	1	0	0		1	1%
Kinetic	0	1	0	0		1	1%
Auditory	26	41	1	18		85	47%
Unusual feelings and sensations	1	8	0	5		14	8%
Hot/cold sensation	1	27	1	4		33	18%
					21	21	12%
Total	40	89	1	31	21	182	100%
Proportion	22%	49%	1%	17%	11%		

3.8 Investigation 1: Experience Table

8th November 2008

Code	Area	Time	Classification	Description
iXA-1	A	22.0 1	Auditory	Whirring sound coming from laptop behind
iXA-2	A	22.0 2	Hot/Cold Sensation	Draft coming over right shoulder whilst sat facing the door
iXA-3	A	22.0 3	Auditory	Fireworks heard
iXA-4	A	22.0 3	Auditory	Voices heard from other team & CCTV Room
iXA-5	A	22.0 5	Auditory	Footsteps from other team heard moving around building
iXA-6	A	22.0 6	Visual	Quick flickering light in top right seen when facing the fireplace, actually inside the fireplace; and the light in that area seems to be getting a lot darker.
iXA-7	A	22.0 6	Hot/Cold Sensation	Draft over right shoulder getting a bit stronger.
iXA-8	A		Visual	The light in the room growing visibly darker.
iXA-9	A	22.0 7	Visual	Motion sensor light come on unsure if another team member outside
iXA-10	A	22.0 7	Other	Battery seems to have gone dead in stills camera on second attempt to take picture.
iXA-11	A	22.0 8	Unusual feelings/sensations	Smell of musty sort of mossy smell coming through What sort of smells are in the location?
iXA-12	A	22.0 9	Auditory	More fireworks going off in the background.
iXA-13	B	22.0 9	Hot/cold sensation	Whilst back is to the window, feeling really cold around the window, and really cold coming down the front of arms
iXA-14	A	22.1 0	Visual	Outside security motion sensor has just gone off again.
iXA-15	A	22.1 2	Auditory	Wind has just got up outside (stops to receive radio message) strange noise at window behind just as starting this voice log; kind of a raspberry blowing type thing.
iXA-16	A	22.1 2	Visual	A possible reflection or something seen moving outside the window, EF guys wandering past, but it wasn't them, it was something quite low to the bottom half of the window. when said that the security light hadn't been
iXA-17	A	22.1 5	Tactile	Tingly sensation across back of neck and across shoulders.
iXA-18	A	22.1 6	Auditory	A bump possibly from other team members
iXA-19	A	22.2 3	Visual	Small blue light seen to bottom right of fireplace
iXA-20	A	22.2 5	Auditory	Sound of either high-pitched sneeze or playful shriek coming from CCTV room.

iXA-21	A	22.2 6	Visual	Although the light has just gone off outside making the light in here even darker; the light level at the sides of the fireplace seems really dark and like silver swirls inside moving around inside with occasional red dots
iXA-22	A	22.2 6	Hot/Cold Sensation	Just prior to those 2 comments, was just thinking that the temperature in the room has got warmer; it's more comfortable
iXA-23	A	22.2 9	Hot/Cold Sensation	The breeze over right shoulder is now turning warm
iXA-24	A	22.3 2	Extra Sensory impressions	Wanting to talk about parlour games & children playing the piano
iXA-25	A	22.3 3	Auditory	Loud bang outside possibly a door
iXA-26	A	22.3 4	Visual	Big flash in the fireplace seen again on the right hand side as looking at it.
iXA-27	A	22.3 5	Visual	Motion sensor outside gone off again
iXA-28	A	22.3 6	Hot/Cold Sensation	Team members walking outside. We can hear their footsteps on the gravel and see them outside the window. Feeling quite cold again
iXA-29	A	22.3 7	Auditory	Something heard behind on the right; it might just be plaster falling down, but it was like a very slight creak.
iXA-30	A	22.3 8	Auditory	Creak heard possibly floorboards with small dancing lights from the direction of fireplace
iXA-31	A	22.4 0	Hot/Cold Sensation	Feeling cold & shivery
iXA-32	A	22.4 0	Unusual Feelings & Sensations	Wire at back of fireplace makes feeling uncomfortable
iXA-33	A	22.4 1	Hot/Cold Sensation	Now shivering with cold – quite a sudden change
iXA-34	A	22.4 1	Extra Sensory impressions	Impression that there used to be some kind of plaque in the central brickwork above the fireplace, like a coat of arms, something like that, some of sort of traditional plaque shape.
iXA-35	A	22.4 3	Visual	The impression of a white light, to the right side of the fireplace, inside the fireplace as you look at it facing.
iXA-36	A	22.4 6	Visual	Room become really dark in again and there seem to be white lights going round the room again
iXA-37	A	22.4 6	Visual	White lights seen in the fireplace again & lots of little sort of dotty things & temperature wise feeling more comfortable again. White lights seen as talking about Nursery Rhymes & other things, and just talking and laughing and the atmosphere was quite light amongst group
iXA-38	A	22.4 8	Extra Sensory impressions	Feeling of something in the middle of group maybe can see some swirls and it actually feels like some tension around head and across the front of eyes, at top of forehead, along brow; still seeing the swirls, white cloudy stuff in the middle of group, whereas before was seen in the fireplace it has now moved closer.

iXA-39	A	22.5 0	Visual	Swirls still in the middle between us, very tiny little lights now forming.
iXA-40	A	22.5 2	Hot/Cold Sensation	Seems to be getting really cold in here.
iXA-41	A	22.5 3	Auditory	Tap heard coming from the right hand corner of the room, next to the fireplace. Or possibly from upstairs,
iXA-42	A	22.5 4	Extra Sensory impressions	Wanting to say parlour tricks & burning sticks
iXA-43	A	22.5 5	Unusual Feelings & Sensations	Overwhelming feeling of being very comfortable and nodding off; Pressure felt in the small of back like someone pushing against me
iXA-44	A	22.5 5	Extra Sensory impressions	Another team member commented that they had that earlier before the start of the session; images of an old man; but very comfortable and just feel like nodding of really, despite feeling very cold
iXA-45	A	22.5 5	Extra Sensory impressions	Feeling of a cat; may have been present, a medium size cat, possibly black, definitely not a dog, definitely a cat.
iXA-46	A	22.5 7	Hot/Cold Sensation	Going extremely cold, particularly from knees down.
iXA-47	A	22.5 8	Auditory	People laughing in another room, possibly other team members
iXA-48	A	22.5 9	Hot/Cold Sensation	Starting to feel very very warm like there are flames everywhere
iXB-1	D	23.1 0		The battery in the camera (Video) has gone flat. There should be 5 hours of battery power and it's no longer there.
iXB-2	B	23.1 4	Hot/Cold Sensation	Room much warmer than the room just in
iXB-3	B	23.1 6	Hot/Cold Sensation	Feeling very cold, draft over right shoulder.
iXB-4	B	23.1 8	Hot/Cold Sensation	Temperature has changed again and on right side feeling a lot more comfortable
iXB-5	B	23:1 8	Extra Sensory impressions	Male and female presence and the names of Edward and Elizabeth who had a young family here.
iXB-6	B	23.1 9	Extra Sensory impressions	The name of Mary who would have had a herb garden here.
iXB-7	B	23.2 1	Auditory	Coming from the right side whilst facing the window in the random room; a sound, quite a low sound of like music, but the strings or chords of a guitar, but quite low. Sound heard by another like a very distant engine, but like low throbbing sound.
iXB-8	B	23.2 1	Extra Sensory impressions	Room feels really calm, really happy; like you just want to play, or take the mickey out of someone, quite a joyful happy room, definitely a lot more comfortable than the fire room we were in before.
iXB-9	B	23.2 3	Extra Sensory impressions	Elizabeth was part of the family; I don't think she was head of the family; I want to talk about making posies with the flowers I have grown in the garden.
iXB-10	B	23.1 4	Extra Sensory impressions	Want to talk about hand clapping games; from small children; this room feels to me like a room where children would play where as the fire room next door was possibly a more formal room where children wouldn't have been allowed to play, or where they

				would have had to have been more quiet; but this room feels quite happy.
iXB-11	B	23.26	Auditory	Whilst in the middle of talking a knocking noise heard; like 3 small knocks.
iXB-12	B	23.28	Hot/Cold Sensation	All 3 gone really cold; Feeling like a spidery sensation on the right side of face.
iXB-13	B	23.28	Unusual Feelings & Sensations	Feeling a spidery sensation on the top of her head.
iXB-14	B	23.30	Unusual Feelings & Sensations	Breeze on the right side of face felt and a dusty smell
iXB-15	B	23.37	Hot/Cold Sensation	Breeze felt around head
iXB-16	B	23.38	Extra Sensory impressions	Want to talk about a carousel, the really, really old fashioned kind with golden horses and perhaps painted wooden horses with lots of children going around with it.
iXB-17	B	23.41	Unusual Feelings & Sensations	Getting a headache, getting a sensation that something happened in the house; something to do with changes of temperature; we've been feeling them all evening; there's something to do with changes in temperature; there's a baby's crib that appears charcoal, not wood.
iXB-18	B	23.43	Extra Sensory Impressions	Getting a feeling like want to run up to the window; I don't know if it's to look out and greet someone, or to try to attract someone's attention.
iXB-19	B	23.43	Extra Sensory impressions	Picture in head of a little girl
iXB-20	B	23.43	Unusual Feelings & Sensations	Want to rub the left side of face, as if the skin is coming away.
iXB-21	B	23.44	Hot/Cold Sensation	As talking about a little girl; I've started shivering.
iXB-22	B	23.44	Hot/Cold Sensation	Another member has started shivering as well, coming from behind her
iXB-23	B	23.47	Auditory	Noise heard from outside; possibly another firework; the other guys didn't hear it.
iXB-24	B	23.49	Visual	The outside light has just gone on & the EF team have gone to investigate the bangs
iXB-25	B	23.50	Extra Sensory impressions	Feeling that the family were mostly little girls, and Billy and Matthew were farm boys that came to visit.
iXB-26	B	23.51	Visual	Whilst looking out of the window in the random room. Directly opposite us is the end wall if the barn; I've just seen a red flash, like a glow, coming from the upper arch window of the barn.
iXB-27	B	23.52	Other	The flash on the camera doesn't want to flash and the red light on the video camera has gone out.
iXB-28	B	23.53	Other	Camera has flashed
iXB-29	B	23.53	Hot/Cold Sensation	Very cold draft just gone across front of me, from left to right.
iXB-30	B	23.54	Hot/Cold Sensation	Breeze felt.
iXB-31	B	23.54	Hot/Cold Sensation	Can feel breeze across face.

iXB-32	B	23.5 4	Hot/Cold Sensation	Feeling really cold and a bit shivery
iXB-33	B	00.0 4	Kinetic	Shining a torch on a stone on the floor: not sure if it was there before we sat down.
iXB-34	B	00.0 8	Unusual Feelings & Sensations	Shining a torch on the wall to right; there is a pipe on the wall to & feel it smells smokey.
iXB-35	B	00.0 9	Hot/Cold Sensation	Reporting that it's gone really cold in here again.
iXB-36	B	00.0 9	Extra Sensory impressions	The feeling of lots of children being around and of being really happy that we were having earlier; Now having feelings of the house being empty, very cold, very empty, impersonal.
iXB-37	B	00.1 1	Extra Sensory impressions	Feels like sitting in the middle of an open space; doesn't feel like there are walls and a roof here.
iXB-38	B	00.1 3	Extra Sensory impressions	Images earlier of a little girl with 2 really long plaits; Feel like she has receded right into the background and we are all saying how the room feels really flat, really lacking in energy.
iYB-1	B	22.0 1	Auditory	Whirring sound heard coming from behind in the corner of the room; possibly was just the laptop fan going off and coming on again
iYB-2	B	22.0 3	Auditory	Laptop fan again, also heard some popping and banging fans again from outside in the front; suspect fireworks. Everyone heard the fireworks
iYB-3	B	22.0 5	Auditory	Fireworks heard outside in the front again by everybody.
iYB-4	B	22.0 6	Auditory	Sound of fireworks again heard by all, coming from the front, could be coming from anywhere
iYB-5	B	22.0 7	Visual	Security light out front has come on & can see 2 figures, Dave & Trystan probably; probably doing an EFA audit and walking round front of building
iYB-6	B	22.0 9	Auditory	Heard some more fireworks, sounds as if coming from the front of the building; but also heard what sounds like a jet engine going over.
iYB-7	B	22.1 9		Just to note a member of the EFA team just came in & there was a bang from the outside door as they closed when they left.
iYB-8	B	22.2 6	Hot/Cold Sensation	Cold breeze from right hand side, which is probably coming from the flue from the old fireplace.
iYB-9	B	22.2 7	Auditory	Fireworks heard by everybody again.
iYB-10	B	22.3 4	Visual	Security light from front of building just come on
iYB-11	B	22.5 6	Auditory	Few seconds ago banging coming from outside
iYA-1	A	23.1 8	Auditory	Occasional low pitched creak noises from around the fireplace.
iYA-2	A	23.4 4	Auditory	Sound like a distant car, sort of motor noise
iYA-3	A	23.4 9	Visual	Security light just come on; Dave and another man just walked past the window
iYA-4	A	23.5 3	Hot/Cold Sensation	Getting pretty cold, but probably putting that down to it being a large room, or airy room, wide open chimney and doors and such like
iYA-5	A	23.5 6	Auditory	Having a radio in my ear so sound direction is not great, but think I could hear a slight noise from upstairs, just a knocking noise.
iYA-6	A	00.0	Auditory	Slight scratching upstairs; might be rodents.

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3.9 Investigation 2: Experience Table

6th December 2008

Cod e	Area	Time	Classification	Description
AX-1	A	21.32	Auditory	Slight sound from shaking of torch
AX-2	A	21.41	Auditory	Slight sound from shaking of torch
AX-3	A	21.43	Auditory	Noise from behind whilst sitting with back to window, like a knock of something being dropped on wood
AX-4	A	21.47	Hot/Cold Sensation Data Logger 1A	Temperature got so low in room you can actually see your breath
AX-5	A	21.48	Auditory	Sound of an owl
AX-6	A	21.52	Auditory	Lots of squeaking from animals heard outside & where the top of the stairs used to be
AX-7	A	21.52	Extra-Sensory Impression	Drawn to landing as if someone watching from there, like a small person or maybe a cat
AX-8	A	22.00	Extra-Sensory Impression	Impression of a lady in a blue satin dress, like she has been out for the evening looking very upset & distraught coming in through the front door walking along corridor looking in room we are in. As if looking for someone but they not here
AX-9	A	22.01	Visual	Camera flash not working
AX-10	A	22.01	Visual	Camera battery low
AX-11	A	22.01	Hot/Cold Sensation Data Logger 2A	Become very cold in warm, temperature dropped considerably over the evening
AX-12	A	22.02		Camera flash
AX-13	A	22.14	Auditory	Sound heard from right hand side of fireplace in the corner, knocking or toilet flushing
AX-14	A	22.16	Extra-Sensory Impression	Weird sensation like floor tilting whilst back to the window. Feeling like left side tilting all the way over, but am feeling tired
AX-15	A	22.17	Auditory	Creak heard or drop of plastic from upstairs. Heard by one other
AX-16	A	22.18	Hot/Cold Sensation Data Logger 6B	Feeling quite warm on right side
AX-17	A	22.18	Auditory	Another tap heard from upstairs in same place as before
BX-1	B	22.45	Visual	CCTV camera flashing on & off; checked
BX-2	B	22.48	Auditory	Lots of chattering in other room
BX-3	B	22.53	Hot/Cold Sensation Data Logger 3A	Temperature in room felt to have gone up slightly by all 3 members
BX-4	B	22.55	Extra-Sensory Impression	Atmosphere become really comfortable
BX-5	B	23.01	Extra-Sensory Impression	Same impression from last visit; sitting in open air or on a platform; lush green grass everywhere; this part of building added later or something happened to this part of the building
BX-6	B	23.03	Auditory	Knock or bang from top right hand corner of room opposite door, definitely upstairs like wood expanding or contracting
BX-7	B	23.04	Auditory	Bang or creak heard from above
BX-8	B	23.06	Auditory	Bang or creak heard from above
BX-9	B	23.07	Auditory	Slightly louder knock or creak more central in

				middle of ceiling, more towards front of group but in centre of room
BX-10	B	23.13	Hot/Cold Sensation Data Logger 3A	Cold draft coming from door to their left
BX-11	B	23.17	Auditory	Sound of bells outside
BX-12	B	23.30		CCTV camera switching on & off again
BX-13	B	23.32	Auditory	Another creak in roof upstairs
BX-14	B	23.33	Auditory	Sounds of distant traffic
BY-1	B	21.43	Auditory	Jet aeroplane heard going overhead
BY-2	B	21.43	Auditory	Strange sound not known if plane or not, but rather odd
BY-3	B	21.46	Visual	Security light came on when a member walked into next door room
AY-1	A	22.47	Auditory	Knock heard between 2 team members on floor, could have been someone's chair, Heard by all
AY-2	A	22.49	Visual	Security light went on outside again, one team member thought it had been on all the while
AY-3	A	23.06	Auditory	Creaking or tap from right hand side near little window in corridor
AY-4	A	23.14	Auditory	Creak heard by window, possibly EMF meter
AY-5	A	23.15	Auditory	Shriek heard from outside, not known if it was a bird or some kind of animal squealing
AY-6	A	23.16	Auditory	Owl heard in distance
AY-7	A	23.17	Auditory	Owl repeatedly heard along with shrieking of other animal outside like they having a conversation. Heard by all 3 team members
AY-8	A	23.31	Auditory	Creak heard coming from small room
AY-9	A	23.33	Auditory	Knocking noise from behind
AY-10	A	23.38	Auditory	Knocking noise from behind again, could be from kitchen but very quiet everywhere else. Its occasionally quite a loud knock or bang
AY-11	A	23.39	Auditory	Knocking noise heard by all team members as referred above

3.10 Investigation 3: Experience Table

3rd January 2009

Code	Area	Time	Classification	Description
iiiAX-1	A	21.49	Auditory	Buzzing in ear probably from camera next to them
iiiAX-2	A	21.55	Auditory	Wooden chair they on sat on is very creaky
iiiAX-3	A	21.57	Auditory	Voices coming from next room
iiiAX-4	A	21.57	Auditory	About 20-30 seconds previous someone's ankle gave a loud click
iiiAX-5	A	22.16	Auditory	Loud rustling of trees or something coming from outside <i>EFA Team gone to investigate & so security light has gone on</i>
iiiAX-6	A	22.17	Extra sensory Impression	Perception of 2 little boys & 2 little girls dancing round the room, ring a ring of roses style. There's also a baby in a crib. The girls are dressed with long curly ringlets, petticoats & aprons with bib fronts & long skirts. The boys are dressed in white baggy shirts. Braces & knee length britches
iiiAX-7	A	22.22	Visual	Flashing light seen outside, like a flash when you set an alarm or something <i>One of the team has just left in his car though as has a migraine</i>
iiiAX-8	A	22.25	Auditory	Clicking or a knocking sound from cupboard to left of fireplace
iiiAX-9	A	22.25	Auditory	Clicking heard as well
iiiAX-10	A	22.25	Hot/Cold Sensation	Can also see breath it is so cold
iiiAX-11	A	22.28	Auditory	Noise heard outside <i>Possibly team member coming back from letting the other leave via the gate</i>
iiiAX-12	A	22.39	Auditory	Screeching or creaking sound to their right Could possibly be gate outside
iiiAX-13	A	22.42	Auditory	Noise heard like moaning or crying, not sure if inside or out so reported to EFA Team <i>Security light has come on again which is EFA Team</i>
iiiAX-14	A	22.45	Auditory	The sound of footsteps from EFA Team sound creepy
iiiAX-15	A	22.47	Auditory	Something like a woo sound, like a horn or funnel or like someone blowing in the top of a bottle. This also reported by another team member & EFA Team
iiiAX-16	A	22.49	Hot/Cold Sensation	Feeling room to their right side
iiiBY-1	B	21.57	Auditory	Knock heard on ceiling above another team members head. Heard by all 3 team members
iiiBY-2	B	22.18	Auditory	Rustling sound heard or like a jacket creaking
iiiBY-3	B	22.24	Visual	Lights seen on walls as another team member drove off site
iiiAY-1	A	23.13	Auditory	Something just heard gone off upstairs like a bang on the floor or something fall over
iiiAY-2	A	23.13	Auditory	Also heard by another team member sounded like cable like something long.
iiiAY-3	A	23.13	Auditory	Interference heard on radio like people chatting, so conversations stopped randomly
iiiAY-4	A	23.18	Unusual Feelings/Sensations	Team member has a fit of the giggles.
iiiAY-5	A	23.18		Team feeling very silly & childlike at moment

iiiAY-6	A	23.19	Auditory	Small tap heard coming from window
iiiAY-7	A	23.19	Hot/Cold Sensation	It's a very cold night & team is in a cold warm but team member feeling a lot warmer & comfortable & happy. Could be due to laughter going on
iiiAY-8	A	23.21	Auditory	Lots of chairs creaking & chattering going on in next room
iiiAY-9	A	23.23	Auditory	Creak heard from upstairs whilst facing the window with the door to their left
iiiAY-10	A	23.23	Auditory	Sounded like creak coming more from doorway
iiiAY-11	A	23.25	Unusual Feelings/Sensations	Although it is really cold in room & you can see your breath, the feeling is quite comfortable
iiiAY-12	A	23.25	Unusual Feelings/Sensations	Not feeling so comfortable, left foot feels it is about to fall off they are so cold
iiiAY-13	A	23.48	Auditory	Lots of chair creaking coming from other room
iiiAY-14	A	00.02	Visual	Light seen moving across like behind the trees, a white light EFA Team gone to investigate
iiiAY-15	A	00.07	Auditory	Thud or footstep heard whilst facing the window to the right in the corner upstairs
iiiAY-16	A	00.11	Auditory	Running water heard at back of building EFA Team gone to investigate
iiiBX-1	B	23.19	Auditory	Faint little knock heard
iiiBX-2	B	23.24	Auditory	2 knocks or creaks heard from right hand side although it sounded like it came from ceiling above. Heard by all 3 team members
iiiBX-3	B	23.41	Auditory	Another team member just entered room next door
iiiBX-4	B	23.46	Auditory	1 knock heard & about 5 seconds later another one heard behind wall. Again all heard by all 3 team members
iiiBX-5	B	23.48	Auditory	A lot of creaking heard from team members chair, although team member adamant they hadn't been moving
iiiBX-6	B	23.55	Visual	A couple of flashes seen outside, unsure if a photo taken or it was car headlights
iiiBX-7	B	23.55	Visual	Same thing witnessed by another but could have been a couple of torch lights
iiiBX-8	B	00.12	Visual	Security light went on when EFA Team member walked past window left to right

4.0 Analysis and Discussion

Data gathered should be analysed in line with the principles of scientific enquiry and in line with stated hypotheses.

Data Type	Treatment
Individual differences	Questionnaires to be aggregated. <i>Added to the reports to draw conclusions based on individual differences.</i>
Control condition CCTV footage and sound	1) At the time observation and inclusion in Timed Phenomena Reports. 2) Subsequent monitoring of variations in sound and movement <i>In both cases reports should be timed to (a) provide evidence during Timed Report Analysis and (b) provide a Control Condition Report.</i>
Temperature fluctuation	Tracking reported changes in Timed Phenomena Reports. Comparing data logger and anemometer outputs to drawn conclusions on cause. <i>See Timed Reports (below)</i>
EM field	Comparison of results over the three investigations. Results should be used to provide a Monitoring Report of the location, drawing conclusions as to whether factors could lead to general reports.
Carbon Monoxide	
Infrasound	
Sound recordings	
CCTV experimental recordings	Tracking recorded sounds and noises compared to Timed Phenomena Reports. <i>Visual and auditory findings will be used as a track-back from Times Phenomena Reports to provide evidence to analyse experiences.</i>
Camcorder experimental recordings	
Stills camera images	

Assumptions in Data Analysis

Special consideration shall be given to hypothesis that original and subsequent haunting experience shall be caused by xenonormal factors. Scientific principles dictate that special consideration is given to the most likely explanation.

Non-Percipient Reports

A report of any visual and sound fluctuations in the Non-Percipient Areas will be provided. This will comprise:

- Timed reports made by CCTV Monitors, along with appropriate footage.
- An automated report, with appropriate footage, of any visual or sound fluctuations throughout the course of all investigations.

These reports will act as evidence to support any experiences reported in Experimental Areas, for example where a noise is heard coming from the Control Area and can be thus be identified.

These reports will also make conclusions as to any events that might have been interpreted as usual had percipients been there to perceive. As such a comparison shall be made between the Control (both with and without previous reports) and Active areas, and an assessment made of any differences. This report will focus on the differences between different types of areas, and whether haunting triggers exist independently of peoples' experience.

Monitoring Report

An examination of the graphed output of the following data logged instruments shall be made:

- Temperature
- Experience Inducing Fields
- Infrasound
- Carbon Monoxide

Assessments will be made based on the graphs and individual data points as to whether any fluctuations would be sufficient to cause 'haunt experiences'. A more dedicated use of this technology would be needed to compare fluctuations with individual accounts, so general conclusions on the possibility of the link with haunt experiences will be made.

Should a location find a strong propensity for such factors to cause haunt experiences, a further investigation will be planned and dedicated to the study of the factor in question.

Extraneous Factors Report

A detailed report will be produced after each investigation about generally identified EFs, along with specific timed EFs identified by auditors, monitors or percipients. This report will input into the analysis of the Timed Phenomena Reports.

Timed Phenomena Reports

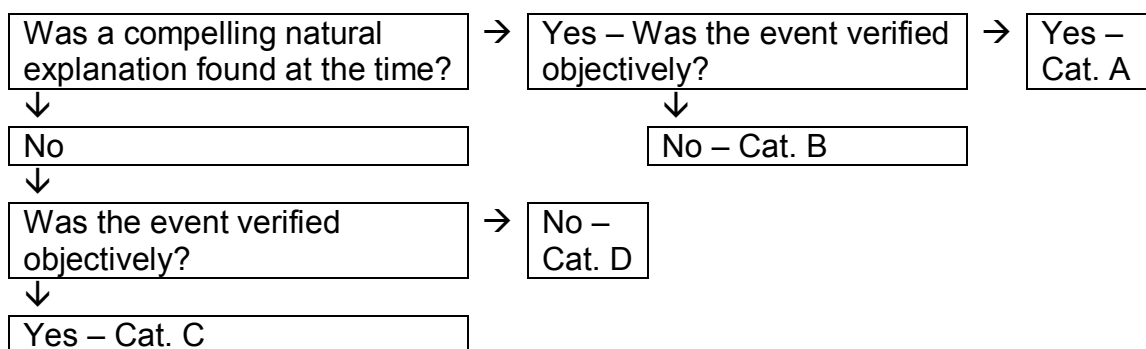
Following each investigation event all notes from percipient groups are transcribed and collected in a tabular format.

Reports will be analysed by the CCTV analyst, photo analyst, Camcorder analysts and Sound analyst who will attempt to find objective evidence for each report.

Each report will also be considered against the EF and Control reports.

Reports will then be subdivided into Objective and Subjective reports.

Evidential Categories



Treatment of Evidential Categories:

- Category A – Objective Xenonormal – strong evidence for a normal explanation. Cause should be noted in analysis.
- Category B – Compelling Xenonormal – fairly strong evidence for a normal explanation. Cause should be noted in analysis, with suggestions for how evidence could better be captured.

- Category C – Unexplained Xenonormal – probably good evidence for a normal explanation. Attempt to recreate events during Analysis Investigation and note findings in report.
- Category D – Insufficient Information. Attempt to recreate events during Analysis Investigation and note findings in report. If a compelling explanation cannot be found, flag up in the report as an area needing further research.

Where Category D events take place and further need for research is identified, the current method will be discarded and a Category D Investigation be designed specifically against the phenomena in question.

4.1 Experience Analysis

Category A

Code	Time	Classification	Description	Analysis
iXA-4	22.03	Auditory	Voices heard from other team & CCTV Room	Human voices. Audio clips confirm that these were the voices of the CCTV control team.
iXA-5	22.05	Auditory	Footsteps from other team heard moving around building	Experient movement. Audio clips from location Y confirm that team members were making notable movements.
iXA-9	22.07	Visual	Motion sensor light come on unsure if another team member outside	EFA team movement. Records from the EFA team show that they were in this location at the time.
iXA-14	22.10	Visual	Outside security motion sensor has just gone off again.	EFA team movement. Records from the EFA team show that they were in this location at the time.
iXA-25	22.33	Auditory	Loud bang outside possibly a door.	Movement of fittings and furnishings. Banging of farmhouse door as per EFA report.
iXB-24	23.49	Visual	The outside light has just gone on.	EFA team movement. EFA team outside, triggering security light.
iXB-27	23.52	Other	The flash on the camera doesn't want to flash and the red light on the video camera has gone out.	Equipment malfunction. Video camera had stopped recording, as per confirmation from analyst.
iYB-5	22.07	Visual	Security light out front has come on & can see 2 figures, probably doing an EFA audit and walking round front of building	EFA team movement. EFA team transcripts confirm they were in this location at the time.
iYB-6	22.09	Auditory	Heard some more fireworks, sounds as if coming from the front of the building; but also heard what sounds like a jet engine going over.	External noise. EFA team confirm plane passing over.
iYB-7	22.19	Auditory	Just to note a member of the EFA team just came in & there was a bang from the outside door as they closed when they left.	EFA team movement. EFA team member changing camera.
iYB-10	22.34	Visual	Security light from front of building just come on.	EFA team movement. EFA team outside, confirmed by session transcripts.
iYB-11	22.56	Auditory	Few seconds ago banging coming from outside.	EFA team movement. EFA team outside, confirmed by transcripts.
iYA-3	23.49	Visual	Security light just come on; two individuals walked past the window	EFA team movement. EFA team outside, confirmed by transcripts.
iiXA-1	21.32	Auditory	Slight sound. Perceived to be from experient shaking his torch in other room.	Experient movement. Visual evidence of experient shaking torch

iiXA-2	21.41	Auditory	Further shaking sound, perceived to be of experient shaking torch.	Experient movement. Visual evidence of experience shaking torch.
iiXA-5	21.48	Auditory	All hear sound of an owl.	External noise. Sound of an owl captured by voice recorders.
iiXA-11	22.14	Auditory	A sound from the right hand side of the fireplace, behind the fireplace in the corner, there was something knocking; toilet flushing I believe.	Human error. Transcripts of the CCTV and EFA teams state this is the time a toilet flush adjacent to the control room was pulled during a session.
iiXB-1	22.46	Visual	Member of EFA team enters room to check cctv camera.	EFA team movement. EFA team in location, confirmed by transcripts.
iiXB-12	23.30	Visual	Lights on CCTV camera going on and off.	Equipment malfunction. Issues arose with the electrical connection to this CCTV camera across evening.
iiYA-1	22.46	Visual	Member of EFA team seen entering location B. Security light has come on outside.	EFA team movement. EFA team outside, confirmed by transcripts.
iiYA-2	22.47	Auditory	Knock heard, on the floor. May have been a banging chair.	Experient movement. Confirmed by audio recording.
iiYA-7	23.16	Auditory	Sound of owl in distance.	External noise. Sound of an owl captured by voice recorders.
iiiAX-2	21.55	Auditory	Wooden chair they on sat on is very creaky.	Experient movement. Confirmed by audio recording.
iiiAX-3	21.57	Auditory	Voices coming from next room.	Human voices. Coincides with report being made on voice recorder for team Y. Confirmed by audio recording.
iiiAX-4	21.57	Auditory	About 20-30 seconds previous, an experient's ankle gave a loud click	Experient movement. Confirmed by audio recording and experient.
iiiAX-5	22.16	Auditory	Loud rustling of trees or something coming from outside EFA Team gone to investigate & so security light has gone on:	External noise. Trees rustling due to movement of birds, as per EFA team transcript.
iiiAX-7	22.22	Visual	Flashing light seen outside, like a flash when you set an alarm or something	External noise. Caused by the unlocking of percipient's car prior to leaving the site due to illness.
iiiAX-10	22.25	Hot/Cold Sensation	Can also see breath it is so cold.	Human breath. Video footage confirms that the breath of percipients could be seen.
iiiAX-12	22.39	Auditory	Screeching or creaking sound to their right.	External noise. Movement of trees causing rustling and creaking sounds, confirmed by EFA team transcript.
iiiAX-14	22.45	Auditory	The sound of footsteps from EFA Team sound creepy.	EFA team movement. EFA team outside, confirmed by transcripts.
iiiAX-15	22.47	Auditory	Something like a woo	External noise. Sound of

			sound, like a horn or funnel or like someone blowing in the top of a bottle. This also reported by another team member & EFA Team.	motorbikes confirmed by EFA team.
iiiBY-2	22.18	Auditory	Rustling sound heard or like a jacket creaking.	External noise. Movement in trees, confirmed by EFA team transcript.
iiiBY-3	22.24	Visual	Lights seen on walls as another team member drove off site.	External noise. Team member left site due to illness.
iiiBX-1	23.13	Auditory	Something just heard gone off upstairs like a bang on the floor or something fall over.	External noise. Confirmed by audio recordings. Similar noises heard during category D research into a succession of similar sounds across sessions.
iiiBX-2	23.13	Auditory	Also heard by another team member, sounded like long cable dragging upstairs.	External noise. Confirmed by audio recordings. Similar noises heard during category D research into a succession of similar sounds across sessions..
iiiBX-4	23.18	Unusual Feelings/Sensations	Team member has a fit of the giggles.	Human voices. Laughing team member captured by audio recording equipment.
iiiBX-8	23.21	Auditory	Lots of chairs creaking & chattering going on in next room	Experient movement. Confirmed by audio recordings from voice recorders.
iiiBX-13	23.48	Auditory	Lots of chair creaking coming from other room.	Experient movement. Noise made by team Y in reaction to banging sound caused by EFA team. Confirmed by audio recordings.
iiiAY-3	23.41	Auditory	Another team member just entered room next door.	EFA team movement. EFA team in location, confirmed by transcripts.
iiiAY-4	23.46	Auditory	1 knock heard & about 5 seconds later another one heard behind wall. Again all heard by all 3 team members.	EFA team movement. EFA team in location, confirmed by transcripts.
iiiAY-8	00.12	Visual	Security light went on when EFA Team member walked past window left to right.	EFA team movement. EFA team in specified location, confirmed by transcripts.

Analysis Notes

EFA team movement

During sessions the EFA team respond to percipient requests to establish the cause of specific reports. Percipients may not be aware of the precise location of the EFA team as they investigate each information request. Although EFA team members follow a predetermined route where possible, they may inadvertently generate additional reports due to the sound of their movement, usage of torches etc.

Equipment malfunction

Although equipment is carefully maintained there are occasions where it may malfunction. This may produce a variety of effects: a change in ambient background noise, the flashing of lights etc.

Experient movement

Throughout sessions percipients remain seated. Percipients may inadvertently create noise due to readjustment of position within their seat, creaking of chairs, tapping of feet etc.

External noise

Although steps are taken to establish the cause of 'normal' sounds within a location, it is not possible to control sounds which may emanate from external locations, including those which may be out of bounds to PSI. The sounds of wildlife, passing traffic, aircraft moving overhead and rustling tree leaves represent common examples.

Human breath

Exhaling in cold air, moisture in human breath becomes chilled to the point where it condenses into a mist – becoming visible.

Human error

Although investigations are conducted in accordance with stringent guidelines, situations may arise where a participant misinterprets or forgets specific instructions.

Human voices

All participants are issued with guidelines as to acceptable speech volume levels for specific parts of a session. Circumstances may arise where these guidelines may be inadvertently overridden; for example, in the event of a sudden shock event.

Movement of fittings and furnishings

Fittings and furnishings in a location may move during an investigation, producing noise. These vary from the creaks and groans of retracting wood as temperatures drop, to the slamming of doors if caught by moving air currents.

Category B

Code	Time	Classification	Description	Analysis
iXA-1	22.01	Auditory	Whirring sound coming from laptop behind	Equipment noise. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iXA-2	22.02	Hot/Cold Sensation	Draught coming over right shoulder whilst sat facing the door	Draught. Improvement: Utilise anemometers on future investigations.
iXA-3	22.03	Auditory	Fireworks heard	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iXA-6	22.06	Visual	Quick flickering light in top right seen when facing the fireplace, actually inside the fireplace; and the light in that area seems to be getting a lot darker.	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-8		Visual	The light in the room growing visibly darker.	Light anomalies. Improvement: Utilisation of light measuring equipment to measure any changes in ambient lighting levels.
iXA-12	22.09	Auditory	More fireworks going off in the background.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iXA-13	22.09	Hot/cold sensation	Whilst back is to the window, feeling really cold around the window, and really cold coming down the front of arms	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXA-15	22.12	Auditory	Wind has just got up outside (stops to receive radio message) strange noise at window behind just as starting this voice log; kind of a raspberry blowing type thing.	Movement of fixtures or fittings. Improvement: Utilise external audio and video recording devices on future investigations.
iXA-16	22.12	Visual	A possible reflection or something seen moving outside the window, EF guys wandering past, but it wasn't them, it was something quite low to the bottom half of the window. The security light was not on at the time.	Reflection. Improvement: Utilise external video recording devices on future investigations, showing the path taken by EFA team.
iXA-17	22.15	Tactile	Tingly sensation across back of neck and across shoulders.	Tactile sensation. Improvement: The subjective nature of reports of such sensations makes them difficult to verify in an objective manner.

iXA-18	22.16	Auditory	A bump possibly from other team members	EFA team movement. Improvement: EFA team to make verbal note of their path during investigations.
iXA-19	22.23	Visual	Small blue light seen to bottom right of fireplace	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-20	22.25	Auditory	Sound of either high-pitched sneeze or playful shriek coming from CCTV room.	Human voices. Improvement: Participants to adhere to appropriate noise level guidelines in order to eliminate the creation of erroneous reports.
iXA-21	22.26	Visual	Although the light has just gone off outside making the light in here even darker; the light level at the sides of the fireplace seems really dark and like silver swirls inside moving around inside with occasional red dots	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-22	22.26	Hot/Cold Sensation	Just prior to those 2 comments, was just thinking that the temperature in the room has got warmer; it's more comfortable	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXA-23	22.29	Hot/Cold Sensation	The breeze over right shoulder is now turning warm	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXA-26	22.34	Visual	Big flash in the fireplace seen again on the right hand side as looking at it.	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-27	22.35	Visual	Motion sensor outside gone off again	External movement. Improvement: Utilise external audio and video recording devices on future investigations.
iXA-28	22.36	Hot/Cold Sensation	Team members walking outside. We can hear their footsteps on the gravel and see them outside the window. Feeling quite cold again	EFA team movement. Improvement: Utilise external audio and video recording devices on future investigations.
iXA-30	22.38	Auditory	Creak heard possibly floorboards with small dancing lights from the direction of fireplace	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-31	22.40	Hot/Cold Sensation	Feeling cold & shivery	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature,

				rendering these difficult to verify.
iXA-33	22.41	Hot/Cold Sensation	Now shivering with cold – quite a sudden change	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXA-35	22.43	Visual	The impression of a white light, to the right side of the fireplace, inside the fireplace as you look at it facing.	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-36	22.46	Visual	Room become really dark in again and there seem to be white lights going round the room again	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-37	22.46	Visual	White lights seen in the fireplace again & lots of little sort of dotty things & temperature wise feeling more comfortable again. White lights seen as talking about Nursery Rhymes & other things, and just talking and laughing and the atmosphere was quite light amongst group	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-38	22.48	Extra Sensory impressions	Feeling of something in the middle of group maybe can see some swirls and it actually feels like some tension around head and across the front of eyes, at top of forehead, along brow; still seeing the swirls, white cloudy stuff in the middle of group, whereas before was seen in the fireplace it has now moved closer.	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-39	22.50	Visual	Swirls still in the middle between us, very tiny little lights now forming.	Light anomalies. Improvement: Possible familiarisation of experients with visual artefacts.
iXA-40	22.52	Hot/Cold Sensation	Seems to be getting really cold in here.	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXA-43	22.55	Unusual Feelings & Sensations	Overwhelming feeling of being very comfortable and nodding off; Pressure felt in the small of back like someone pushing against me	Experient feelings. Improvement: The subjective nature of reports of such sensations makes them difficult to verify in an objective manner.
iXA-47	22.58	Auditory	People laughing in another room, possibly other team members	Human voices. Improvement: Participants to adhere to appropriate noise level guidelines in order to eliminate the creation of

				erroneous reports
iXA-48	22.59	Hot/Cold Sensation	Starting to feel very very warm like there are flames everywhere	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXB-2	23.14	Hot/Cold Sensation	Room much warmer than the room just in	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXB-3	23.16	Hot/Cold Sensation	Feeling very cold, draft over right shoulder.	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXB-7	23.21	Auditory	Coming from the right side whilst facing the window in the fire room; a sound, quite a low sound of like music, but the strings or chords of a guitar, but quite low. Sound heard by another like a very distant engine, but like low throbbing sound.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iXB-11	23.26	Auditory	Whilst in the middle of talking a knocking noise heard; like 3 small knocks.	Movement of fixtures or fittings. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iXB-12	23.28	Hot/Cold Sensation	All 3 gone really cold; Feeling like a spidery sensation on the right side of face.	Tactile sensation. Improvement: The subjective nature of reports of such sensations makes them difficult to verify in an objective manner.
iXB-13	23.28	Unusual Feelings & Sensations	Feeling a spidery sensation on the top of her head.	Tactile sensations. Improvement: The subjective nature of reports of such sensations makes them difficult to verify in an objective manner.
iXB-14	23.30	Unusual Feelings & Sensations	Breeze on the right side of face felt and a dusty smell	Cold/heat sensations. Improvement: Utilise anemometers on future investigations.
iXB-15	23.37	Hot/Cold Sensation	Breeze felt around head	Draught. Improvement: Utilise anemometers on future investigations.
iXB-17	23.41	Unusual Feelings &	Getting a headache, getting a sensation that something	Category: Experient feelings Improvement: The subjective

		Sensations	happened in the house; something to do with changes of temperature; we've been feeling them all evening; they are something to do with changes in temperature; there's a baby's crib that appears charcoal, not wood.	nature of reports of such sensations makes them difficult to verify in an objective manner.
iXB-20	23.43	Unusual Feelings & Sensations	Want to rub the left side of face, as if the skin is coming away.	Tactile sensation. Improvement: The subjective nature of reports of such sensations makes them difficult to verify in an objective manner.
iXB-21	23.44	Hot/Cold Sensation	As talking about a little girl, I've started shivering.	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXB-22	23.44	Hot/Cold Sensation	Another member has started shivering as well, coming from behind her	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXB-23	23.47	Auditory	Noise heard from outside; possibly another firework; the other guys didn't hear it.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iXB-28	23.53	Other	Camera has flashed	Human error. Improvement: Percipients should be reminded of team guidelines and instructions where appropriate.
iXB-29	23.53	Hot/Cold Sensation	Very cold draft just gone across front of me, from left to right.	Draught. Improvement: Utilise anemometers on future investigations.
iXB-30	23.54	Hot/Cold Sensation	Breeze felt.	Draught. Improvement: Utilise anemometers on future investigations.
iXB-31	23.54	Hot/Cold Sensation	Can feel breeze across face.	Draught. Improvement: Utilise anemometers on future investigations.
iXB-32	23.54	Hot/Cold Sensation	Feeling really cold and a bit shivery	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iXB-33	00.04	Kinetic	Shining a torch on a stone on the floor: not sure if it was	Discoveries. Due to the presence of

			there before we sat down.	debris on the floor it is considered likely that an oversight on behalf of the percipient may account for this. This represents an exceptional case.
iXB-35	00.09	Hot/Cold Sensation	Reporting that it's gone really cold in here again.	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iYB-1	22.01	Auditory	Whirring sound heard coming from behind in the corner of the room; possibly was just the laptop fan going off and coming on again	Equipment noise. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iYB-2	22.03	Auditory	Laptop fan again, also heard some popping and banging fans again from outside in the front; suspect fireworks. Everyone heard the fireworks	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iYB-3	22.05	Auditory	Fireworks heard outside in the front again by everybody.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iYB-4	22.06	Auditory	Sound of fireworks again heard by all, coming from the front, could be coming from anywhere	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iYB-8	22.26	Hot/Cold Sensation	Cold breeze from right hand side, which is probably coming from the flue from the old fireplace.	Draught. Improvement: Utilise anemometers on future investigations.
iYB-9	22.27	Auditory	Fireworks heard by everybody again.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iYA-4	23.53	Hot/Cold Sensation	Getting pretty cold, but probably putting that down to it being a large room, or airy room, wide open chimney and doors and such like	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iiXA-4	21.47	Hot/Cold Sensation	Temperature has got so low in this room, you can actually start to see your breath now	Human breath. Improvement: Visual recording to capture all percipients within panorama.
iiXA-6	21.52	Auditory	Sound of animals squeaking outside	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiXA-9	22.01	Other	Trying to take flash but camera doesn't seem to want to go off	Human error. Improvement: Team

			at moment	members should be reminded of guidelines and instructions where appropriate.
iiXA-10	22.01	Hot/Cold Sensation	It is very cold in the room; temperature has dropped considerably over the evening	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iiXB-2	22.48	Auditory	Sound of chattering heard from within location A – probably the other team.	Human voices. Improvement: Participants to adhere to appropriate noise level guidelines in order to eliminate the creation of erroneous reports.
iiXB-6	23.03	Auditory	Two experients heard a knock or bang from top right hand corner of the room, opposite the door, or upstairs, sound like wood expanding almost, or contracting.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiXB-10	23.13	Hot/Cold Sensation	Draught in room, coming from the direction of the door.	Draught. Improvement: Utilise anemometers on future investigations.
iiYB-1	21.45	Auditory	Sound of jet plane passing overhead.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiYA-4	23.06	Auditory	Sound of creak or tap 'near the little window in the corridor'	Movement of fixtures or fittings. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiYA-5	23.14	Auditory	Sound of creak by the window from direction of spectrum analyser.	Movement of fixtures or fittings. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiYA-6	23.15	Auditory	Two experients report sound of animal squeaks from outside.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiYA-8	23.17	Auditory	Conversation can be heard from cctv room.	Human voices. Improvement: Participants to adhere to appropriate noise level guidelines in order to eliminate the creation of erroneous reports
iiYA-9	23.17	Auditory	Owl heard again, as is the screeching of other animals from outside.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiYA-11	23.33	Auditory	Sound of knocking noise from	Plumbing.

			wall adjacent to kitchen.	Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiYA-12	23.38	Auditory	Further sound of knocking noise from wall adjacent to kitchen	Plumbing. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiYA-13	23.39	Auditory	Further report of knocking noise.	Plumbing. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiiAX-1	21.49	Auditory	Buzzing in ear probably from camera next to them	Equipment noise. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiiAX-8	22.25	Auditory	Clicking or a knocking sound from cupboard to left of fireplace.	Movement of fixtures or fittings. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiiAX-9	22.25	Auditory	Clicking heard as well	Movement of fixtures or fittings. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiiAX-13	22.42	Auditory	Noise heard like moaning or crying, not sure if inside or out.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiiAX-16	22.49	Hot/Cold Sensation	Experient feeling warm on their right side.	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iiiBY-1	21.57	Auditory	Knock heard on ceiling above another team members head. Heard by all 3 team members.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiiBX-3	23.13	Auditory	Interference heard on radio like people chatting, so conversations stopped randomly	Radio interference. Improvement: Sweep radio channels before investigation to check for other users on identical frequencies (i.e. taxi companies).
iiiBX-5	23.18	Unusual Feelings/Sensations	Team feeling very silly & childlike at moment.	Experient feelings. Subjective nature of report makes it impractical to record it effectively.
iiiBX-6	23.19	Auditory	Small tap heard coming from window. Numerous clicks and knocks heard across all three	Movement of fixtures or fittings. Improvement: Employ longer

			sessions.	EFA sessions to account for a wider selection of sound sources.
iiiBX-7	23.19	Hot/Cold Sensation	It's a very cold night & team is in a cold room, but team members feeling a lot warmer & comfortable & happy. Could be due to laughter going on.	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iiiBX-9	23.23	Auditory	Creak heard from upstairs whilst facing the window with the door to their left.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiiBX-10	23.23	Auditory	Sounded like creak coming more from doorway.	Movement of fixtures or fittings. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiiBX-11	23.25	Unusual Feelings/Sensations	Although it is really cold in room & you can see your breath, the feeling is quite comfortable.	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iiiBX-12	23.25	Unusual Feelings/Sensations	Not feeling so comfortable, left foot feels it is about to fall off they are so cold	Cold/heat sensation. No improvement required; quantity and position of dataloggers is considered adequate. Such reports may also be subjective in nature, rendering these difficult to verify.
iiiBX-15	00.07	Auditory	Thud or footstep heard whilst facing the window to the right in the corner upstairs.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiiAY-1	23.19	Auditory	Faint little knock heard	Movement of fixtures or fittings. Improvement: Employ longer EFA sessions to account for a wider selection of sound sources.
iiiAY-2	23.24	Auditory	2 knocks or creaks heard from right hand side although it sounded like it came from ceiling above. Heard by all 3 team members.	External noise. Improvement: Utilise external audio and video recording devices on future investigations.
iiiAY-5	23.48	Auditory	A lot of creaking heard from team members chair, although team member adamant they hadn't been moving.	Experient movement. Improvement: Remind team members of guidelines and instructions where appropriate.

Analysis Notes

Cold/heat sensation

Unexpected sensations of heat or coldness may be explained by a variety of causes including movement, psychological or physiological factors and draughts.

Discovery

An object found by participants that is perceived to have been absent from the location at an earlier time in the investigation. Accidental oversight presents a common explanation for discoveries, verifiable with video or photographic evidence.

Draught

Moving air currents may produce sensations of cold or warmth for participants. In some situations they may lead participants to report feelings of being touched or brushed against. With particular reference to the investigation of Stanton Farmhouse, the presence of chimneys, open doors, incomplete building work and damaged windows raised the likelihood of draughts as a cause for certain phenomena experienced by percipients.

EFA team movement

During sessions the EFA team respond to percipient requests to establish the cause of specific reports. Percipients may not be aware of the precise location of the EFA team as they investigate each information request. Although EFA team members follow a predetermined route where possible, they may inadvertently generate additional reports due to the sound of their movement, usage of torches etc.

Equipment noise

Electrical equipment used during sessions may emit noise at low volume levels. Examples include humming from laptop computers and video camcorders.

Experient movement

Throughout sessions percipients remain seated. Percipients may inadvertently create noise due to readjustment of position within their seat, creaking of chairs, tapping of feet etc.

External movement

Although due care is taken to guard against the presence of human visitors during an investigation it is not possible to control the movement of passers-by outside the boundaries of a location. Likewise, the movement of wildlife outside of a building cannot be controlled.

External noise

Although steps are taken to establish the cause of 'normal' sounds within a location, it is not possible to control sounds which may emanate from external locations, including those which may be out of bounds to PSI. The sounds of wildlife, passing traffic, aircraft moving overhead and rustling tree leaves represent common examples. During the investigation at Stanton Farmhouse the level above areas X and Y were out of bounds due to a lack of access.

Human breath

Exhaling in cold air, moisture in human breath becomes chilled to the point where it condenses into a mist – becoming visible.

Human error

Although investigations are conducted in accordance with stringent guidelines, situations may arise where a participant misinterprets or forgets specific instructions.

Human voices

All participants are issued with guidelines as to acceptable speech volume levels for specific parts of a session. Circumstances may arise where these guidelines may be inadvertently overridden; for example, in the event of a sudden shock event.

Light Anomalies

In conditions of low light, as the eye adjusts to darkness, individuals may observe pinpoints, swirls or streaks of light. These are typically artefacts originating from within the eyeball, referred to as entopic phenomena.

Movement of fittings and furnishings

Fittings and furnishings in a location may move during an investigation, producing noise. These vary from the creaks and groans of retracting wood as temperatures drop, to the slamming of doors if caught by moving air currents.

Plumbing

Plumbing related pipes within a location can emit unexpected banging, tapping and gurgling sounds. This may be caused by movement of water within the pipes (central heating, flushing toilets etc) or changes in temperature of the pipes leading to their expansion or retraction.

Radio interference

PSI utilises two way radios during investigations. Although steps are taken to ensure use of a free frequency, public radio transmissions may be intercepted causing users to pick up interference or unexpected voices.

Reflection

Natural or manmade light may be reflected from a variety of surfaces back to the vision of percipients. Although every care is taken during pre-investigation EFA sessions to account for these, some may not be noticed or appear at the time, i.e. they may arise with a changed or new light source.

Tactile sensation

Unusual physical sensations such as tingling or the feeling of being poked. These can be attributed to a variety of causes; actual physical (insects, cobwebs, running sweat etc.) or physiological (muscle spasms etc.).

Category C

Code	Time	Classification	Description	Evidence
iiXB-3	22.53	Hot/Cold Sensation	All experients feel temperature has gone up slightly.	Beyond possible priming of witnesses by the original report of a temperature change, no physical reason could be established as to perception of a rise in temperature. Recorded temperatures in the room ranged from 5.0 to 6.0°C, showing a minor (0.5°C) rise, albeit not out keeping with other readings across the duration of the session. The continued use of datalogging equipment across investigations is considered adequate.

Category D

Code	Time	Classification	Description	Analysis
iXA-7	22.06	Hot/Cold Sensation	Draught over right shoulder getting a bit stronger.	During group analysis, participants produced anecdotal evidence for the presence of draughts. However, neither the presence nor strength of a draught could be objectively verified. Use of anemometers of future investigations are hoped to resolve this issue.
iXA-10	22.07	Other	Battery seems to have gone dead in stills camera on second attempt to take picture.	See iXB-1 for group analysis of battery life loss during investigations.
iXA-11	22.08	Unusual feelings/sensations	Smell of musty sort of mossy smell coming through What sort of smells are in the location?	During group analysis team members noted the differing smells they perceived in location A. Musty smells were noted by participants, presenting a possible cause for this report. Attention should be drawn to ambient smells during future pre-investigation EFA reports.
iXA-29	22.37	Auditory	Something heard behind on the right; it might just be plaster falling down, but it was like a very slight creak.	Group analysis involved participants listening for the sound of falling plaster and attempting to identify the cause. Although listeners heard a small number of slight creaks and taps the causes could not be ascertained. It is possible that retraction of fittings may be a cause, as is the dislodging of plaster and other materials due to movement from the (out of bounds) upstairs area. Therefore it is not possible to attribute a compelling cause to this report, although the presence of similar noises across all three investigations suggests they are 'normal' for the location. Attention should be drawn to ambient sounds during future pre-investigation EFA reports.
iXA-32	22.40	Unusual Feelings & Sensations	Wire at back of fireplace makes feeling uncomfortable	The ambiguity of this statement means it is not possible to establish what has been claimed. Unfortunately, the percipient is unable to recall what occurred. To avoid future occurrences participants should be reminded that

				recorded statements need to be both precise and detailed.
iXA-41	22.53	Auditory	Tap heard coming from the right hand corner of the room, next to the fireplace. Or possibly from upstairs,	During group analysis attempts were made to listen for similar sounds. At 21.09 team members heard a succession of tapping sounds. Consensus over the source of the sounds could not be achieved; some felt they originated from the fireplace, others in upstairs rooms which remained out of bounds. Future occurrences may be made less likely if investigators have access to an entire location, thereby having increased opportunity to establish the cause of specific taps and creaks. On this occasion building work entailing the removal of a staircase rendered such access as impractical.
iXA-46	22.57	Hot/Cold Sensation	Going extremely cold, particularly from knees down.	Dataloggers positioned at a uniform height do not support claims of a temperature drop; readings remaining constant between 12 and 12.5°C. It is not possible to measure changes in body temperature using equipment currently deployed by PSI.
iXB-1	23.10		The battery in the camera (Video) has gone flat. There should be 5 hours of battery power and it's no longer there.	During group analysis an attempt was made to test the hypothesis that a battery used in cold conditions would drain quicker than one used in warmer conditions. To ensure fairness, both batteries were fully charged and placed in identical model camcorders. At 21:25, 539 minutes of battery life was indicated on the camcorder in the 'cold' location B & 236 minutes read on the warm camcorder battery in the baseroom. At 21:47 the camera in the cold condition had lost exactly 40 minutes of battery life and the camera in the warm condition had lost precisely 20 minutes. These findings suggest batteries may drain quicker in colder conditions. However, these findings may be questioned to the considerable difference in starting life between the two

				batteries. Further experimentation utilising new batteries and a more significant sample size may resolve this issue.
iXB-4	23.18	Hot/Cold Sensation	Temperature has changed again and on right side feeling a lot more comfortable	The datalogger positioned adjacent to the experient recorded a temperature increase from 12 to 14.5°C in the preceding minute. Video evidence was unavailable. Accidental contact between the experient and the datalogger's thermometer probe was presented as a possible explanation. During analysis dataloggers A1 and B4 were flicked to gauge any effect this would incur upon baseline readings. No change was noted on A1 although contact with B4 coincided with a <i>drop</i> of 0.5°C. Although it is therefore implied that accidental contact with a datalogger probe may cause a drop in recorded temperature, the small sample size means this cannot be taken as definite. This highlights an area for future research.
iXB-26	23.51	Visual	Whilst looking out of the window in the random room. Directly opposite us is the end wall of the barn; I've just seen a red flash, like a glow, coming from the upper arch window of the barn.	Group analysis involved the study of the external scene described by the experient. No red flashes were observed from within the barn although an ambient orange glow could be seen behind it. Future occurrences may be verified by additional CCTV coverage recording a location's surrounds.
iXB-34	00.08	Unusual Feelings & Sensations	Shining a torch on the wall to right; there is a pipe on the wall to & feel it smells smoky.	During group analysis team members noted the differing smells they perceived in location B. One participant described this pipe as smelling both 'smoky' and 'choking', presenting a possible cause for this report. Attention should be drawn to ambient smells during future pre-investigation EFA reports.
iYA-1	23.18	Auditory	Occasional low pitched creak noises from around the fireplace.	Group analysis involved participants listening for creaking sounds and attempting to identify the cause. Although listeners heard a small number of slight creaks and taps the causes could not be

				ascertained. It is possible that retraction of fittings may be a cause, Therefore it is not possible to attribute a compelling cause to this report, although the presence of similar noises across all three investigations suggests they are 'normal' for the location. Attention should be drawn to ambient sounds during future pre-investigation EFA reports.
iYA-2	23.44	Auditory	Sound like a distant car, sort of motor noise	During group analysis team members conducted a number of drive pasts on the nearest public road. Other team members remained in location A, listening for the passing car. This confirmed that it was possible to hear passing traffic from within location A, rendering this as a likely cause of the report.
iYA-5	23.56	Auditory	Having a radio in my ear so sound direction is not great, but think I could hear a slight noise from upstairs, just a knocking noise.	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of sounds originating in the upstairs area.
iYA-6	00.06	Auditory	Slight scratching upstairs; might be rodents.	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of sounds originating in the upstairs area.
iiXA-3	21.43	Auditory	Noise heard from behind experient sitting with back to the window. It was like a kind of knock or something being dropped on wood.	See iYA-1.
iiXA-12	22.16	Unusual feelings & sensations	Experient had 'a really weird sensation like the floor was tilting, my back to the window & it's my left side; it just felt my back was tilting over that way, but it could just be because I'm very tired.'	Video footage does not show if the experient had overbalanced or was tilted at an unusual angle. It remains possible that the origins of this report may be psychological in nature (feelings of tilting). The physical aspect of such reports may be better captured utilising wider angle video shots featuring all experients.
iiXA-13	22.17	Auditory	The sound of a creak coming from upstairs; heard by two experients.	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of sounds originating in the upstairs area.

iiXA-14	22.18	Hot/Cold Sensation	Experient feeling quite warm on their right side.	Dataloggers positioned at a uniform height do not support claims of a temperature drop; readings remaining constant between 2.5 and 3.0°C. It is not possible to measure changes in body temperature using equipment currently deployed by PSI.
iiXA-15	22.18	Auditory	Further creak from upstairs	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of sounds originating in the upstairs area.
iiXB-4	22.55	Unusual feelings & sensations	All experients feel the atmosphere in the room is 'really comfortable'.	The ambiguity of this statement means it is not possible to establish exactly what has been claimed. To avoid future occurrences participants should be reminded that recorded statements need to be both precise and detailed. It should also be noted that feelings of comfort are subjective; individual criteria as to what constitutes 'comfort' may vary from individual to individual.
iiXB-7	23.04	Auditory	Further sound of creak from upstairs.	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of sounds originating in the upstairs area.
iiXB-8	23.06	Auditory	Another creak from upstairs.	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of sounds originating in the upstairs area.
iiXB-9	23.07	Auditory	Slightly louder knock or creak, and it was more central towards the middle of the ceiling.	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of sounds originating in the upstairs area.
iiXB-11	23.17	Auditory	Sound of bells from outside.	Group analysis could not locate any compelling cause for the sound of bells. This account remains unexplained.
iiXB-13	23.32	Auditory	Another creak from the ceiling, or upstairs.	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of

				sounds originating in the upstairs area.
iiXB-14	23.33	Auditory	The sound of distant traffic.	See iYA-2 for analysis of traffic sounds.
iiYA-3	22.49	Visual	Experient notes security light has just come on. May have been on whilst member of EFA team came into building	Report iiYA-1 highlights 22.46 as the time at which a member of the EFA team triggered the security light. Group analysis consisted of an experiment in which the external security light was triggered. Team members were diverted away from the range of the light's sensors to avoid influence. The light extinguished after a time period of three minutes and twenty four seconds. Therefore, it is likely – although not certain – that the security light was already on at the time report iiYA-3 was made.
iiYA-10	23.31	Auditory	Creak heard from upstairs area – possibly above location B	The presence of this noise could not be ascertained from the audio recordings captured during the session. See iXA-41 for analysis of sounds originating in the upstairs area.
iiiAX-11	22.28	Auditory	Noise heard outside.	The ambiguity of this statement means it is not possible to establish what has been claimed. Further details are required to compare the type of sound with likely sources. To avoid future occurrences participants should be reminded that recorded statements need to be both precise and detailed.
iiiBX-14	00.02	Visual	Light seen moving across like behind the trees, a white light	At the time this report was made, subtle lights could be seen in the tops of trees due to Christmas celebrations. The quantity of white lights amongst these was not recorded at the time; additionally, movement of tree branches do not offer a compelling explanation for the apparent movement of the white light. However, during nearby walkers could be heard prior to the beginning of the investigation. Their use of white lights, presumably torches, revealed their position. This remains a possible cause for this report, but one that cannot be

				objectively verified.
iiiBX-16	00.11	Auditory	Running water heard at back of building	This report was made after the group analysis session. The building possesses a drainage system, including roof guttering. Further information is required to establish a precise cause. Similar reports in the future may be accounted for by seeking drains, overflow pipes and guttering during pre-investigation EFA sessions.
iiiAY-6	23.55	Visual	A couple of flashes seen outside, unsure if a photo taken or it was car headlights. EFA team find no indication of lights – impossible to control external sources. Cars, planes, humans etc.	This report was made after the group analysis session. Traffic or passing walkers present possible causes, although neither can be objectively verified. Attention should be made during future EFA sessions to establish the effect of lights from passing traffic.
iiiAY-7	23.55	Visual	Same thing witnessed by another but could have been a couple of torchlights	See iiiAY-6.

Extra Sensory Impressions

Code	Time	Classification	Description	Analysis
iXA-24	22.32	Extra Sensory impressions	Wanting to talk about parlour games & children playing the piano	Extra Sensory Impressions (ESIs) are reports which relay information allegedly obtained by sensory means beyond the five recognised senses; i.e. by the disputed methods of clairvoyance, clairaudience, psychic or mediumistic ability. Science is yet to objectively validate the either the factual existence or accuracy of these methods. Therefore, the use of ESIs as evidence is not in keeping with the methodology employed by PSI. They are retained in this report for interest and reference purposes only.
iXA-34	22.41	Extra Sensory impressions	Impression that there used to be some kind of plaque in the central brickwork above the fireplace, like a coat of arms, something like that, some of sort of traditional plaque shape.	
iXA-42	22.54	Extra Sensory impressions	Wanting to say parlour tricks & burning sticks	
iXA-44	22.55	Extra Sensory impressions	Another team member commented that they had that earlier before the start of the session; images of an old man; but very comfortable and just feel like nodding of really, despite feeling very cold	
iXA-45	22.55	Extra Sensory impressions	Feeling of a cat; may have been present, a medium size cat, possibly black, definitely not a dog, definitely a cat.	
iXB-5	23:18	Extra Sensory impressions	Male and female presence and the names of Edward and Elizabeth who had a young family here.	
iXB-6	23.19	Extra Sensory impressions	The name of Mary who would have had a herb garden here.	
iXB-8	23.21	Extra Sensory impressions	Room feels really calm, really happy; like you just want to play, or take the mickey out of someone, quite a joyful happy room, definitely a lot more comfortable than the fire room we were in before.	
iXB-9	23.23	Extra Sensory impressions	Elizabeth was part of the family; I don't think she was head of the family; I want to talk about making posies with the flowers I have grown in the garden.	
iXB-10	23.14	Extra Sensory impressions	Want to talk about hand clapping games; from small children; this room feels to me like a room where children would play where as the fire room next door was possibly a more formal room where children wouldn't have been allowed to play, or where they would have had to have been more quiet; but this room feels quite happy.	
iXB-16	23.38	Extra Sensory impressions	Want to talk about a carousel, the really, really old fashioned kind with golden horses and perhaps painted wooden	

			horses with lots of children going around with it.
iXB-18	23.43	Extra Sensory Impressions	Getting a feeling like want to run up to the window; I don't know if it's to look out and greet someone, or to try to attract someone's attention.
iXB-19	23.43	Extra Sensory impressions	Picture in head of a little girl
iXB-25	23.50	Extra Sensory impressions	Feeling that the family were mostly little girls, and Billy and Matthew were farm boys that came to visit.
iXB-36	00.09	Extra Sensory impressions	The feeling of lots of children being around and of being really happy that we were having earlier; Now having feelings of the house being empty, very cold, very empty, impersonal.
iXB-37	00.11	Extra Sensory impressions	Feels like sitting in the middle of an open space; doesn't feel like there are walls and a roof here.
iXB-38	00.13	Extra Sensory impressions	Images earlier of a little girl with 2 really long plaits; Feel like she has receded right into the background and we are all saying how the room feels really flat, really lacking in energy.
iiXA-7	21.52	Extra Sensory impressions	Experient feels as if a person or cat is on the landing where top of stairs used to be.
iiXA-8	22.00	Extra Sensory impressions	An impression of a lady in a blue satin dress, dressed as though she's been out for the evening; looking very upset, distraught, coming in through the front door ,walking along the corridor, looking in the room that we are in, the fire room, looking around her and just walking straight into the other room, as if she doesn't live here but she expects to see people here, and they're not here.
iiXB-5	23.01	Extra Sensory impressions	Experient feels as if they are 'sitting in the open air on a raised platform; lush green grass everywhere in the open air; either this part of the building was added later, or something happened to this part of the building.'
iiiAX-6	22.17	Extra sensory Impression	Perception of 2 little boys & 2 little girls dancing round the room, ring a ring of roses style. There's also a baby in a crib. The girls are dressed with long curly ringlets, petticoats &

			aprons with bib fronts & long skirts. The boys are dressed in white baggy shirts. Braces & knee length britches	
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4.2 Context, Non-Percipient and Control Analysis

Investigation 1:

Experiences reported by team composition

Group	Total Reports	PBQ Scale
Team X	86	62%
Team Y	16	42%

Reports by area investigated

Area	Reports
Small room	49
Fire room	54
Total	103

Mean context questionnaire results

Location	Ranking	Team A	Team B	Mean
Fire Room	Independent	2.3	2.3	2.3
Fire Room	Comparative	2.7	3.0	2.8
Small Room	Independent	3.0	2.0	2.5
Small Room	Comparative	2.7	3.0	2.8
1st Floor Landing	Independent	1.6	1.0	1.3
1st Floor Landing	Comparative	2.0	1.0	1.5
2 nd Floor Landing	Independent	2.3	1.7	2.0
2 nd Floor Landing	Comparative	2.7	2.3	2.5

Investigation 2:

Experiences reported by team composition

Group	Total Reports	PBQ Scale
Team X	31	59%
Team Y	14	45%

Reports by area investigated

Area	Reports
Small room	17
Fire room	28
Total	35

Mean context questionnaire results

Location	Ranking	Team A	Team B	Mean
Fire Room	Independent	3.0	2.3	2.7
Fire Room	Comparative	3.7	3.3	3.5
Small Room	Independent	2.6	3.0	2.8
Small Room	Comparative	2.6	3.6	3.2
1st Floor Landing	Independent	1.0	1.7	1.3
1st Floor Landing	Comparative	2.0	1.0	1.5
2 nd Floor Landing	Independent	1.7	1.7	1.7
2 nd Floor Landing	Comparative	1.7	2.0	1.8

Investigation 3

Experiences reported by team composition

Group	Total Reports	PBQ Scale
Team X	14	54%
Team Y	6	41%

Reports by area investigated

Area	Reports
Small room	10
Fire room	10
Total	20

Mean context questionnaire results

Location	Ranking	Team X	Team Y	Mean
Fire Room	Independent	2.3	2.3	2.3
Fire Room	Comparative	3.0	3.3	3.2
Small Room	Independent	2.3	2.0	2.2
Small Room	Comparative	3.6	2.3	3.0
1st Floor Landing	Independent	1.0	1.6	1.3
1st Floor Landing	Comparative	1.0	2.3	1.6
2 nd Floor Landing	Independent	2.0	1.0	1.5
2 nd Floor Landing	Comparative	2.3	2.0	2.2

Paranormal Belief

This section demonstrates that the team with a higher mean paranormal belief score, team X, consistently reported many more experiences than team Y.

Previous research indicates that there is a relationship between the two although this should not be necessarily considered to be causal.

Perception of Context

Across groups and time there was little difference between the perception of spookiness of the 'active' areas against the 'control' areas. Generally the 'spooky' context of the non-percipient areas was found to be lower than that of the percipient areas.

There was also a slight downward trend in the independent rankings of the site across time, suggesting that the percipients found the site less spooky over time.

Non-Percipient Areas

Across all sessions a CCTV camera was position in each non-percipient area. This footage was monitored in 'real time' by the CCTV team and was also reviewed following each investigation.

The analysis of the first investigation gave rise to some technical issues which were corrected in the criteria for analysis. Following this there appeared to be no disturbance in the visual mode in either non-percipient area.

It could be argued that if there were no physical indicators of ambiguous phenomena in either area, that experiences in similar rooms on site might be internal, rather than objective, events.

Control Areas

There was little difference in reporting rates between the 'active' percipient area (54, 26 and 6) and the 'non-active' percipient area (49, 31 and 14).

This suggests that perceptions across 'haunted' and 'non-haunted' locations were not dissimilar. This could be interpreted as providing evidence for the idea that the experiences reported were more related to the 'blind' percipients involved than the environment.

4.3 Continuous Improvement Report

PSI recognises that even when a substantive method is put in place limitations would always be presented and continuous improvement would always be possible.

PSI has committed to continually highlighting any limitations, rather than ignoring them, and suggesting action for further improvement.

The following areas for improvement were highlighted:

- Draughts where cause could not be determined. Use of quality anemometers was highlighted as important in progressing this area, especially where the cause of heat/cold was air current that temperature data loggers were incapable of measuring.
- External video and audio so the cause of noises and lights outside the percipient areas could be more objectively verified. To be meaningful this would call for an additional CCTV set up of at least and additional four cameras.
- Additionally, the above would allow the course of Extraneous Factors Auditors to be more reliably tracked.
- Light anomalies and lux meters. It was suggested that lux meters might be able to provide evidence for the objectivity of apparent light anomalies. It was suggested that hand-held lux meters were not sufficiently reliable and that higher end data logging lux meters were untested for such a purpose. Given the cost of units, further research was recommended.
- Human noises. Percipients to be especially briefed with respect to minimisation of avoidable EFAs between percipient groups.
- Building specific noises. This location recorded a number of building specific issues that could not be objectively verified. These included parts of the building interior dropping out of place. It was recommended greater use of physical baselining with cameras might help but that future sites were less likely to be derelict. No satisfactory method of accounting for natural plumbing noises has been advanced.
- Quality control. It was recognised that portfolio holders were presenting portfolios in either draft form or in need of checking and amending for mistakes and queries. Given the specialist nature of report overview, resources would be better used if portfolio holders were briefed to present 'report ready' submissions for quality checking.
- Given the evidential nature of Extra Sensory Impressions a discussion is needed about the level of resources used reporting and analysing such impressions, and whether their recording is justifiable.
- Longer Extraneous Factors Audit. Longer EFA sessions may assist percipients in identifying such factors and should be incorporated if possible.
- Camcorder field of view. These should be set to allow sight of all percipients where possible.

Wherever possible improvements should be incorporated in advance of the next formal investigation.

5.0 Executive Summary

The Executive Summary is designed to provide a shorter, accessible overview of the investigation. This is included as part of PSI's ethical commitments to clients.

Across the months of November, December 2008 and January 2009 PSI conducted three structured, longitudinal phenomena investigations at Stanton Farmhouse. These constituted six hours of percipient observation sessions and an additional group analysis session.

Xenonormal approach

Unlike 'paranormal investigators' inspired by motives of religion, thrill seeking and pseudo-scientific experimentation, PSI's longitudinal study of Stanton Farmhouse was conducted from a rationalist perspective. This stance arose following a three year study of study of 'standard' paranormal investigation methods. This revealed weaknesses and ethical concerns as to the use of specific techniques including ghost photography, communication with purported spirits via audio recording equipment and inappropriate environmental monitoring procedures. The 'assumption led' approach of accepting the existence of ghosts and haunted houses necessitates the filtering of evidence to fits one's own biases. By contrast, the approach utilised by PSI during sought to trace xenonormal (i.e. what is normal but may be interpreted as paranormal) and normal causes of haunting events, thereby highlighting those instances which could not be explained in this manner.

Longitudinal phenomena investigation structure

Utilising a xenonormal approach PSI structured their longitudinal study of Stanton Farmhouse into four distinct stages:

- A pre-investigation phase during which eye witness and historical reports of unusual events were collected. Based upon this information four rooms were identified for investigation. Of these, two physically similar rooms were assigned for percipient observation, two for CCTV and audio monitoring. Within each pair, one room was associated with haunting events, the other free of such associations as a 'control'.
- A baseline investigation, allowing percipients, audio-visual and environmental monitoring equipment to collect information, thereby assisting the development of a picture revealing the normal state of the areas under study. Extraneous factors which may have influenced or otherwise affected the collection of such information were also identified.
- A percipient investigation providing opportunity for percipients to observe, in matched circumstances to original reports of haunting events, and monitor similarities between the two. Additional physical, monitoring and extraneous factor baseline data was also collected.
- An analysis investigation providing time for percipients to observe, in matched circumstances, with knowledge of previous reports. Percipients utilised their experiences in an attempt to find explanations for original

reports. Time was also set aside for a group analysis session, seeking xenonormal explanations for original and subsequent reports of haunting activity. Additional physical, monitoring and extraneous factor baseline data was also collected.

Session protocol

Across the three investigations PSI planned for consistency of roles amongst participants, thereby allowing them to build a sensory baseline of the areas under investigation. Participants were assigned one of three roles: percipient, CCTV monitoring, extraneous factors auditing (EFA).

Two teams of percipients spent equal time in each percipient observation location, reporting sensory observations and perceived haunting events. To avoid use of assumptions related to the circumstances in which witnesses have reported haunting events, percipients sat in rotating conditions of silence, quiet discussion and self-distracting activities. Where necessary, percipients called upon EFA team members to locate xenonormal explanations for reports. Two team members were assigned to the task of observing live CCTV footage from both percipient areas and non-percipient areas.

Equipment

For the longitudinal study of Stanton Farmhouse PSI utilised only equipment suitable for objectively identifying the causes of xenonormal events. These included use of stills, CCTV and video cameras, supported by digital audio recording devices. Perceived temperature changes were monitored with second sensitive dataloggers. Research has also linked haunting events with carbon monoxide poisoning and specific Experience Inducing Fields (EIFs); carbon monoxide (CO) detecting dataloggers and spectrum analysers were utilised to monitor the presence of these respectively. To ensure consistency of findings the internal timing mechanisms of all devices were synchronised with a master clock. Equipment was also positioned in the same location across all three investigations.

Evidential categories

Reports made by percipients were collated across all three investigations. They were allocated an evidential category according to the manner in which they addressed two key criteria. Firstly, could the event be explained with a compelling natural explanation? Secondly, was the event verified objectively by equipment or verbal notes compiled by team members?

Analysis of evidence

Across three investigations, a total of 182 reports were made by percipients. During analysis they were assigned to the following categories:

Report Type	Cat A	Cat B	Cat C	Cat D	ESI	Total	Proportion
Visual	12	11	0	4		27	15%
Tactile	0	1	0	0		1	1%
Kinetic	0	1	0	0		1	1%
Auditory	26	41	1	18		85	47%
Unusual feelings and sensations	1	8	0	5		14	8%
Hot/cold sensation	1	27	1	4		33	18%
					21	21	12%
Total	40	89	1	31	21	182	100%
Proportion	22%	49%	1%	17%	11%		

Category A (Objective Xenonormal) – 40 reports, 22% of the overall total, could be readily explained and objectively verified. Within this category 25 reports related to auditory phenomena such as those produced by wildlife and the accidental closing of the main door to the Rangers' Offices. Of the remaining, all but two related to reports of visual phenomena, most often caused by movement of the EFA team and the triggering of an external security light.

Category B (Compelling Xenonormal) – This category produced 89 reports, 48% of the overall total of reports. These were explainable but lacked objective evidence to provide proof of their causation. Again, auditory phenomena produced most reports, 41, highlighting a need for future investigations to feature improved methods of identifying external noise sources. 11 visual reports and 8 of unusual feelings and sensations were also made. However, amongst these were reports of swirling lights and heightened emotions. Both are likely natural in origin, the former common in conditions of low light. PSI recognises that an effective method of verifying such subjective phenomena would be difficult to achieve. Analysis of data provided by carbon monoxide dataloggers and spectrum analysers revealed no indication that either CO or EIFs contributed to any report from categories B, C or D.

Category C (Unexplained Xenonormal) – Just one event lacked a compelling natural cause but was objectively verified. This related to a minor temperature rise of less than 1°C, occurring at the same time as percipient reports of feeling warmer. It is unusual for individuals to immediately detect such a slight change. One tentative explanation is coincidence, although this cannot be verified.

Category D (Insufficient Evidence) – 31 events could be neither objectively verified nor explained by compelling natural causation.

Extra Sensory Information – ESIs are reports which relay information allegedly obtained by sensory means beyond the five recognised senses; i.e. by the disputed methods of clairvoyance, clairaudience, psychic or mediumistic ability. Science is yet to objectively validate the either the factual existence or accuracy of these methods. Therefore, the use of ESIs as evidence is not in keeping with the methodology employed by PSI. They are retained in this report for interest and reference purposes only.

Group Analysis

Prior to the beginning of the third investigation time was dedicated to seeking xenonormal causes of Category D phenomena. The analysis session featured a succession of simple experiments, each related to a specific report made during previous investigations.

The analysis session was able to provide compelling natural explanations for seven reports relating to the following phenomena:

- Reports of the sound of passing traffic; drive-pasts by team members revealed they could be heard in percipient areas.
- Prematurely drained camera and video camera batteries, likely explained by quicker discharge in low ambient temperatures.
- Musty and smoky smells within percipient areas.
- Perceptions that a security light may have come on without an obvious cause. Experimentation suggests this was caused by a passing EFA team member.

Group analysis was unable to locate compelling explanations for 19 reports:

- 58% of all Category D reports related to auditory phenomena, typically the sound of knocks and taps from an upstairs room. These were not captured on audio recording equipment. Due to demolition of a staircase PSI were unable to identify potential explanations related to 9 reports of sounds from upstairs.
- A 2.5°C temperature rise. Suggestion had been made that accidental contact occurred between an experient and the datalogger thermometer probe recording the change.
- Sensations of tilting and changes in body temperature. These reports were made by sole percipients and are subjective by their nature.
- White lights seen moving in nearby trees, although walkers utilising torches present a possible explanation.
- One report of light phenomena occurring inside the barn.
- The sound of running water at the back of the Farmhouse and flashes of light to the front of the building. These occurred in the third investigation following completion of the group analysis session.
- The reported sound of bells coming from outside of the building.

Four reports could not be investigated in an objective nature due to the ambiguity of their reporting. One further report of a change in the strength of a draught could not be investigated due to insufficient equipment, although a natural cause cannot be ruled out.

Implications

From group analysis PSI has been able to identify two areas for future research:

- The effects of cold temperatures upon battery lifespan.
- The effect on temperature recordings when datalogger probes come into contact with human skin or clothing.

Identified from experient observation sessions and group analysis are possible means of improvement for future investigations. The most significant of these are:

- The means of providing improved audio and visual recording in the external areas around the location under investigation.
- The use of anemometers to record strength of moving air currents.

Conclusion

The report of the investigation of Stanton Farmhouse was designed to be an informing and exhaustive account of PSI's time at the venue. It is offered to the interested reader as a logical and rational account of investigation into paranormal. The document was not intended to be scholarly, but to display critical assessment and scientific treatment within the boundaries set out in the report.

Of 182 reports from percipients PSI were able to provide objective, compelling or likely xenormal explanations for 129 (70%) of these. A single report is considered unexplained but with likely xenormal origins. Of the remaining 52 reports 21 were categorised as Extra-Sensory Information. The assumptive nature of such reports is not in keeping with the scientific method and they have been discounted as evidence.

Group analysis revealed compelling natural explanations for 7 of the remaining 31 reports, 5 more being discounted due to insufficient detail or lack of specialised equipment.

This leaves a remaining 19 reports for which likely xenormal causes were not ascertained.

It should be noted that failure to isolate xenormal causes does not automatically render an event as paranormal in origin. Access restrictions to upstairs rooms meant PSI was unable to investigate the origins of 9 reports of auditory phenomena. Methodological refinements, including the use of anemometers and audio visual equipment in external locations, may have revealed potential xenormal causes. Two areas for future research have also been identified which may provide retrospective explanations: the effect of accidental human contact upon temperature probes and that of low temperatures upon battery lifespan.

How to contribute to this journal

Any paranormal investigator, psychical researcher or academic is welcome to make a submission to the Journal of Investigative Psychical Research.

Being published in this journal is an opportunity for your ideas and research to influence hundreds of people interested in the paranormal, many of which are researchers.

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Submissions to the journal typically fall into one of the following categories:

- Letter
- Book Review
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- Article

Writing a letter:

Letters can be written in a personal style. Letters should either:

- Be of a subject of interest to readers.
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Letters should be fewer than 1500 words.

Writing a book review:

A book review should concern a book that is recent and would be of interest to those engaged in paranormal investigation or research.

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Research notes should represent original or cutting edge research that is not complete, but for some reason is suitable for publication.

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An academic style should apply, where possible, to all research notes and articles.

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- Arguments should be logically structured and present both sides of the story.
- Assertions should, where possible, be referenced and conform to the Harvard system.

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Submissions are first considered by the Journal Editors in terms of relevance to the Journal's stated research objective.

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