

Overview of 2.5 Years of Ghost Research in the State of Victoria, Australia.

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Abstract A summary review is provided of 23 ghost investigations which were conducted in 10 locations in the state of Victoria, Australia over a period of 2.5 years. 13% of investigations have yielded anomalous data, that is, data not easily explained by natural causes. 30 % of locations with a reputation of being haunted yielded this anomalous data. The relatively low number of anomalous observations in the opinion of the authors, may be a representation of the expected frequency of haunting activity. However, evidence is presented suggesting that not all locations were genuine haunted locations. Overall, the low yield of anomalies over a 2.5 year time span suggests that alternative methods should be considered. It is suggested that a communal database of ghost and haunting site investigation reports be established to facilitate more effective means of testing current theories of haunting phenomena.

Introduction

There are a number of viewpoints about the existence of ghosts and haunting and what they may be. These viewpoints range from the purely mundane (Radford 2008), psychological (Houran and Lange 2001; Houran ; Kennedy 2005; Lamont, Coelho et al. 2009), largely environmental (Lambert 1960; Tandy and Lawrence 1998; Tandy ; Braithwaite and Townsend 2005), to various combinations of the aforementioned (Maher 2002; Wiseman, Watt et al. 2003). McCue (2002) provides a review of theories of haunting. With respect to site investigations, these viewpoints all highlight potentially relevant factors that an investigator must be aware of during an investigation. Factors include lighting condition, , weather conditions, magnetic field fluctuations, infrasound, psychological factors such as personality type and expectation, structural issues and the locations' reputation amongst many others. While all the factors must be kept in mind to undertake an objective analysis of the field data, the practical task of sourcing and researching allegedly haunted locations comes with its own challenges. The following is an overview of the data obtained from site investigations of allegedly haunted buildings located in Melbourne and country Victoria over a 2.5 year period.

Within a two and a half year period spanning June 2008 to October 2010, in association with a not-for-profit research group (Oceanic Ghost Research) the authors performed 23 investigations across 10 locations. The investigations were conducted with no a priori hypotheses, with the belief that this

may have lead to exclusion of important information or data. The only assumption made was that if the location was reported to be haunted, or had a strong reputation of haunting in the past, then these reports may have been based on one or a combination of the above-mentioned factors, be they environmental, psychological or paranormal. However, with the benefit of hindsight, this rule of thumb may require some revision. From an environmental perspective, which was the groups' primary focus, the worthiness of certain locations requires more careful consideration (Cornell 1995). The author's personal experience with motives of individuals, publicity seeking and embellishment of tales with each successive telling has lead to a reconsideration of investigating sites simply based on their reputation.

Methods

In an attempt to capture any potentially valuable information, the methods employed focused on environmental factors, with some psychological considerations coming into play during background research and percipient interviews. Interviews of the available percipients as well as owners and staff at the locations proved valuable in two respects: not only the information that was provided which was of potential importance but also the manner in which it was portrayed (i.e. not just what they said, but how they said it). This later aspect is difficult to quantify but nevertheless does provide some insight into the motives and expectations of the individuals.

Environmental monitoring was conducted with the idea that as much of the electromagnetic spectrum should be data-logged or monitored within the environment as was practicable. Thus at one end of the spectrum, low frequency magnetic fields were monitored using magnetic field detectors, moving up to the visible portion of the spectrum with standard video and photographic equipment. In between these two points were also the infrared (IR) region and the far infrared, or thermal regions, detected using night vision cameras and thermal imaging cameras respectively. Higher portions of the EM spectrum such as ultraviolet and ionizing radiation were not covered due to lack of availability of instruments. In addition, ambient temperature, humidity and auditory signals were also data-logged. The logic for monitoring as much of the spectrum as possible is simply that the phenomena are so elusive that essentially it is still not known when, where, why or how it manifests itself in the physical environment (if it does at all). Therefore the procedure was undertaken in an attempt to maximize the chances of capturing something should it occur.

Results

Spanning approximately a 2.5 year period from June 2008 to October 2010, 23 investigations were conducted, where each investigation would span between 6-10 hours of data-logging, typically overnight.

In total 3 out of 10 locations investigated provided data which could not be easily explained by natural causes. This does not imply that these occurrences were paranormal in nature, only that from the hundreds of hours of investigations, audio, video footage etc., these events were the most unusual. The details of the locations, at the request of the owners, will be kept confidential; however, the observed phenomena are described. For sake of continuity, possible interpretations of the phenomena are described in the results sections rather than the discussion.

Event # 1 – 26-10-2008

The first experience was observed by two members (called A and B) of the research group in an decommissioned former hospital for the mentally infirm. There had been 2 previous visits to this location and the bulk of the monitoring equipment was focused in other wings of the hospital. At approximately 3 am whilst in an unmonitored location, two members witnessed numerous orange "flashes" of light spanning a little over a minute. Initially it was witnessed by member A who was looking towards a doorway and noticed a faint orange glow of light in the vicinity of the doorway leading to a large common room (approximately 6-8 meters from where he was situated). Bringing it to the attention of member B, he too shifted his focus from a window towards the door and within 10 seconds both members witnessed another flash followed by 2 more over an irregular period spanning 60 seconds. The orange flashes, lasting little over a second appeared, from a distance of 6-8 meters, to be approximately 25-35cm in diameter with a nondescript edge. It could not be determined if they were 2 dimensional reflections or 3 dimensional spheres of light.

The first impression presented by member A was that it was the light beam from a torch outside passing through an unshuttered window, perhaps by a security guard or a trespasser. This was dismissed because during the first occurrence, witnessed only by member A, member B was looking through the window facing the same courtyard from where the light source would have to have originated from. A search of the outside of the building, conducted immediately after the events occurred did not reveal anyone. Additionally, the colour of the observed light was inconsistent with that of regular torchlight.

Other possibilities considered were the orange flash of the indicator lights on one of the member's cars when locking with a remote. The cars were parked outside the opposite side of the room from where we searched. However those windows facing the cars, and all others in the room (aside from the one facing the courtyard) were covered with curtains. Attempt to reproduce the flash using the remote locking did not succeed. The interior of the room was examined for possible sources of light, such as LEDs from smoke detectors on the ceilings. There was no electric power to the room and no lights were observed. Other possibilities considered included light entering the room from a second doorway and corridor, however no windows in the second corridor had a direct line of sight into the room, nor was there a chance for reflections to occur, as all the windows were located in rooms which had their doors closed.

Event #2 – 25-07-2009

The second event occurred after closing time at an operational cinema. Five research group members simultaneously heard a sound akin to a male exhale. The sound was described by members as 'passing between' the group while they were casually conversing in the cinema foyer. Several minutes later, all 5 members heard music playing, but could not locate its origin. The type of music was described as "old style" dance music (e.g. 1910-1940 era), but it was very difficult for any members to be more specific. When members split up and moved to search for the location of the music, the sound stopped. The authors impression was that the music was not heard externally in space, but rather internally as if it was "in the head". The most obvious cause was a cafeteria adjoining the cinema which may have been playing music. However this was discounted, as the cafe closed several hours prior to the reported event and no people remained at the cafeteria. Furthermore, on subsequent visits to the location, when music could be heard from the cafeteria, it

could be heard distinctly and its origin was obvious. A second and most probable cause were the “synergistic” combination of refrigeration equipment and drinks machines producing humming noises when they periodically switched on to maintain their operating temperature. It is not out of the question that a specific combination of these refrigeration machines (of which there were approximately 5) switching on at overlapping times, could have generated a set of harmonic frequencies that could be perceived as melodic or harmonic segments suggestive of music through the process of pareidolia (interpreting vague or random stimuli as something familiar or significant). The only difficulty with this explanation is that numerous follow up investigations were conducted and no further auditory phenomena were perceived.

Event #3 – 12-02-2010

The final event of significance occurred at an historic homestead. A sound described as resembling a low level male exhalation was heard simultaneously in two locations at opposite ends of the homestead (separation approx. 25-30 metres). Four members, grouped in pairs and situated at opposite ends of the homestead both heard a low level male exhale. Both groups reported the sound’s point of origin to be localised and within 1-2 meters of their own vicinity. The sound was detected on hand held voice recorders located in the rooms, but not on audio recordings made by two condenser microphones located in the corridors connecting these rooms. The conversation within each group, discussing the voice was overheard by a fifth member located at the base station, monitoring the DVR and audio. He independently confirmed that both groups reported the sound and both groups described it in the same fashion before learning of the other groups account.

A possible, and likely source of the sound may have been from animal vocalizations, particularly possums, who’s presence in the area was acknowledged by the staff. Some possum vocalisations could be misinterpreted as a low exhale. But the propagation of the sound to opposite ends of the building apparently bypassing much of the house is difficult to reconcile.

Contributions of the homestead’s acoustic characteristics were considered, as the location was found to be highly transmissive for sound, possibly due to the uncarpeted corridors. However the two microphones positioned within the corridors connecting the two rooms did not detect the anomaly. Air vents in the walls were considered as possible alternate acoustic links between the two rooms. The original portion of the homestead contained air vents which potentially linked certain rooms through wall cavities. However this was discounted as a possible mechanism as one of the rooms where the sound was heard was part of an addition to the homestead and did not share the same air vents. Another possibility, that of transmission of sound from under the floorboards was unlikely due to the limited space (< 10cm) for animals larger than rodents such as mice or rats, who generally have infrequent and typically high pitched vocalisations.

The last possibility was from the roof space, the most likely refuge for larger animals such as possums. Possum activity within the roof space may have carried along its entire length and propagated through the ceiling and into the rooms at the ends of the building. This would explain why the audio equipment in the corridors didn’t record the voice. Although this is the most likely interpretation, it too is not without its problems. Noises emanating from the ceiling would be expected to be heard as arising from the ceiling. However all members of the group who heard the

voice placed its origin within a 2 m radius and approximately 1-1.5 meters from floor level. Furthermore, no animal sounds, from possum or other have been heard emanating from inside the house at any other time during any other investigations, suggesting possum activity may be restricted to the perimeter of the house rather than the house interior. The animal vocalisation interpretation appears as the most logical mundane explanation, however it still does not seemingly explain the anomaly in its entirety.

Discussion:

Whilst the anomalies described cannot be easily explained by mundane causes, neither can they be viewed conclusively as having a paranormal source. Of the three anomalies that were observed, all transpired in only one sensory modality. Without co-registration across multiple detectors such as EMF meters, voice recorders, video recorders etc, interpretation is made all the more difficult. Although one interpretation could be that these events occur individually and across only a very narrow band of "energy levels" in terms of the electromagnetic spectrum, this is highly unlikely. Looking over case studies (Alvarado and Zingrone 1995) it is difficult to imagine so many varieties of paranormal reports, spanning temperature changes, visual, auditory and tactile experiences as all possessing their own individual and unique 'causes' without some overall commonality behind their origin. Such interpretation would conflict with prior cases involving multi-modal reports (Alvarado and Zingrone 1995) or detection with multiple instruments such as fogging effects on Polaroid camera co-occurring with magnetic field fluctuations (Nichols and Roll 2000). Indeed, the difference between our 'unimodal' detections (i.e. only auditory or visual etc.) and prior cases with multi-modal reports (Gauld 1972) is likely due to the fact that two of the three anomalies reported occurred outside of locations of primary focus, hence in absence of the full array of detectors to capture any co-occurrence.

Percentage of investigations bearing anomalies

Three of 23 investigations (13%) were 'eventful' with respect to coinciding with anomalies. This included investigations conducted across 10 locations. Even if the 7 locations which did not exhibit noteworthy events were to be removed from calculations, the percentage of 'eventful' investigations would become 21.4% (3 of 14 investigations). So a conservative view of the lower and upper probability of detecting an event would be between 13% and 21% of investigations. These values are however subject to too many factors to be of any practical use, for the reasons discussed below.

No tangible data regarding the detection probability of anomalous events were uncovered in the course of background research carried out by Oceanic Ghost Research. This is primarily because much of the published data on haunting and poltergeist activity involve case studies utilizing witness statements (Gauld 1972). The witness statements may be of potential use in obtaining a frequency count of occurrences, however the un-controlled environment, the psychological state of mind of the witness not to mention their potential for psychogenic experiences would likely lead to unreliably high estimates.

Case reports of haunting activity indicates that events occurs sporadically, with periods of inactivity and periods of variably intensity. To obtain a true measure of the expected frequency and variance of anomalies for a specific location would require a prolonged full-time data logging investigation, ideally at least 12 months in duration. This would allow monitoring of activity over a wide range of environmental conditions and across all seasons. However open access to such a location is very rare. Realistically, investigations are often limited to a handful of sessions within a single site.

The other main reason for the difficulty in gauging frequency is that each location could be expected to have its own unique rate of occurrence. This would presumably make any estimate applicable to only the one location.

However it would be interesting to perform a comparison of the relative frequency of occurrences between different sites. This in itself may bear some interesting information, such as correlations between frequency and geographic location, or some other variable, be it psychological or environmental.

Percentage of locations bearing anomalies

Of the 10 locations investigated, 30% (3 of 10) provided some form of anomalous data. It is highly likely that more prudent selection of investigation sites would likely lead to higher "success" rates. A number of the sites investigated, upon further investigation turned out to have little solid evidence to support their reputations. In several cases, innocent (although opportunistic) use of the very weak and largely unscrutinised evidence of ghost activity was used to increased publicity for the venue.

However the most interesting case of "misinformation" with respect to haunting activity is from a case of active deception. The location was in fact confirmed, by a prior resident, to be haunted in the past. However, based on the information presented to us by management and ground staff, the two investigations carried out at that site focused on rooms and areas with no history of haunting. Although both the staff and management were all adamant about the specific occurrences and the particular rooms where they occurred, the investigations yielded no data. It was not until a chance encounter with a prior resident of the location, and on whom some of the stories were based, that the true story of the haunting history came to light.

In essence, the original stories were founded on some true reports of haunting occurring in particular rooms of a complex of buildings. However over time the stories were embellished and made more fanciful by tour guides, and eventually both the actual events and the rooms in which they occurred had changed. At some point in time a TV show was filmed at the location, focusing on psychic detection of ghosts by a "paranormal" group. As could be expected of an enthusiastically produced TV show, this paranormal group "confirmed" the false stories by detecting the relevant spirits. When the original resident raised the issue with management as to the inaccuracies of the TV show it was too late. The management, in a move to maintain their reputation were forced to promote the stories that were consistent with the aired TV show. This set of events essentially led to the fabrication of a legend, not entirely dissimilar to the events reported by Cornell (1995), highlighting the negative influence of media on the propagation of misinformation. Nevertheless, the investigations hold intrinsic value, even if that's only as control experiments.

Overall, it is prudent to be more critical of locations. Performing thorough background research could potentially save much time, effort and misallocation of resources.

Low yield of data and possible future directions

Although these values do not provide a very large sample for statistical purposes, it does suggest that investigations conducted with stringent methodology and procedures aimed to minimize false positive data appears to result in few true anomalies. The long period over which these anomalies were acquired suggests that additional strategies may be beneficial to a more timely acquisition of field data.

Conducting site-based research and collecting the types of anomalies mentioned above is a time consuming and costly process; a process of considerable importance to making progress in the field of ghost research. However, by themselves, these observations have thus far provided little insight into the origin of the reports of such phenomena or the underlying mechanisms. Progress in the field could be greatly accelerated by establishing a communal collection of investigation results across numerous research groups.

Case reports make up much of the literature, and these have been successfully compiled to provide valuable insights into ghost and poltergeist activity (Gauld and Cornell 1979; Alvarado and Zingrone 1995). The contributions of site investigations could further add useful data to the case reports. For example, Braithwaite and Townsend (2005) narrowed down the cause of haunting activity within a room of a castle, to a strongly magnetised metal bedhead which was thought to modulate brain activity. Aside from these individual reports of unique findings, which provide valuable insight, there does not appear to be an organised compilation of data available for meta-analysis as there are for case studies. Site investigations, when conducted with appropriate methodology, have distinct advantages over case reports, with respect to accurate reporting of time and events along with baseline conditions and a range of monitored variables. In light of some evidence suggesting that the correlation between solar phenomena and reports of "visions" of the recently deceased may be linked by geomagnetic field fluctuations (Randall and Randall 1991), it would seem pragmatic to take steps to establish a communal collection of site investigation data in order to reveal other potential correlations between haunting activity and environmental variables (Wiseman, Watt et al. 2002).

An accumulation of reports on site investigations inclusive of eventful and uneventful investigations alike, could have great potential in resolving the importance of various theories of haunting and poltergeist activity. Reporting of a wide range of factors acquired during the site investigations, such as temperature, weather conditions, geographic location, time of detections, mode of detection and other useful information could be pooled and stored for future comparisons. Such a database would allow numerous correlations to be investigated and furthermore, allow statistical analysis to be conducted based on specific theories. A more united effort from the scientific community could significantly advance progress in research of phenomena described as haunting and poltergeist activity.

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