

## How to Investigated the Paranormal...Scientifically

**Before there was New Jersey Paranormal Resource Group, there was Skylands Paranormal Investigations. Back then, Co-Director John wrote a series of blogs on the how to's of paranormal investigation, using sound scientific principles. I asked him for permission to post them here. D.R.**

Welcome to what I hope will be a fairly consistent series of articles/blog entries!

I happen to be one of the Lead Investigators for Skylands Paranormal Investigations (SPI), based out of northwest New Jersey. I've been on several cases with our director, David Rountree, and I've had several long conversations with Dave about the nature of paranormal research and possible advancements in the field. Dave is very good at taking ideas, both internal and external, and bringing them together in a practical manner. Dave tends to offer up information from journals, scientific websites, and news reports in the interest of generating discussion. My approach, at least for the purpose of the current articles, will be more practical and pragmatic.

As a whole, SPI has been slowly but surely expanding, bringing in technically astute individuals with strong scientific and engineering backgrounds. This is in keeping with our stated intention: to conduct scientific investigations into reported paranormal activity. But what exactly does that mean, and what does it offer to the paranormal investigation field?

The short answer is that it offers an additional method of investigating a site with reported paranormal activity. The vast majority of investigative groups around the world rely on friends or fellow believers, many claiming to be sensitives, and base their conclusions on personal experience. Others consider themselves scientific or technical because they use digital cameras, camcorders, and audio recorders to collect "evidence". Based on this "evidence" alone, a client might be told a location is haunted, or perhaps worse, rife with demonic activity.

There are dozens of articles waiting to be written on all of those details, but to begin, we need to define what a "scientific investigation" means.

The core consideration in this case is "investigation". Never mind about the scientific part; if the basic principles of investigation are ignored, it doesn't matter what the philosophical approach happened to be. Paranormal investigators are supposed to conduct investigations, so they better have the essentials in mind before stepping out the door. So before there can be any discussion of "science" or "paranormal", there needs to be a discussion on good investigative practices. First and foremost, any investigation must begin with the understanding that the investigator is an interloper on the situation. You are inevitably walking into the aftermath of some unknown event or experience, one which may still be ongoing, and you cannot come to any meaningful conclusions without defining the parameters. That means documenting, documenting, documenting.

There will be a "victim" or "victims", those who have experienced something profound enough to lead them to request investigators to walk through the door. So witness interviews are incredibly important. Not only do you have to dig into the details of the experience, but you have to define the parameters: where it happened, when it happened, who was present, if it happened before, and so on. This information should be gathered well ahead of time, and if possible, in the location where the event took place. It's all about context. The investigator has to understand, on a basic level, what happened and who was involved.

It should be remembered that the event, no matter how "active", must be considered an effect to be understood. Nothing happens without a cause, and the vast majority of the time, the cause is incredibly mundane. The perception of the witnesses must be examined to determine if it is reliable. Questions should be asked regarding unusual changes at the location; not otherworldly changes, but rather, something that might coincide with the effect being studied.

The investigative goal is to understand the moment that the event took place in near-perfect detail. The investigator has to put himself or herself in the shoes of the "victims", and understand their perspective well enough to consider why they experienced an event in the manner that they did. If this sounds repetitious, that's because it is. Any investigation means digging down beneath the surface explanation of things and getting closer to the truth, regarding of what that

truth might be.

Some groups call this “debunking”. That’s not quite correct. “Debunking” assumes the nonvalidity of an event, which is not exactly the concept at play. (Even so, the heart is often in the right place.) Investigation is simply the collection of information towards the goal of reaching a defensible conclusion. If the collection of information is incomplete, the conclusion is harder to defend. Taken another way, if little or no context exists for an effect, how can someone claim to define a cause?

For the same reasons, one cannot conduct an investigation with pre-conceived notions. This is not as simple as it sounds. A homicide detective obviously walks onto a crime scene knowing that death has occurred. However, they don’t immediately assume homicide; they need to build a case for that cause from the information available. And they certainly can’t walk onto the scene thinking that the butler did it before a shred of information is obtained.

So the paranormal investigator must consider all mundane possibilities first and foremost. This should not be seen as a matter of choice or a simple difference in approach.

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In the first article, I discussed the importance of good investigative techniques in the field of paranormal investigation. The point was relatively simple: knowing how to conduct a basic investigation of anything should be the core of any paranormal investigator’s personal arsenal. It goes without saying that professional experience with investigations would be an asset. Law enforcement agents, for example, would have the skill set necessary, but clinical psychologists also know how to chase down details and information under the right conditions. Another strong source of investigative experts would come out of scientific research or engineering departments, where identifying unknown sources of variation is a daily exercise.

It would seem obvious that any group designed around the notion of “scientific investigation” of reported paranormal activity should consist of scientists and engineers. However, that is not precisely what the term means. One does not have to possess a degree in the sciences to conduct “scientific investigations”.

In this case, “scientific” is more about a mode of thinking, a process of considering information, than it is about theoretical research. A group can conduct scientific investigation without delving into highly technical equipment types. All it takes is the ability to eliminate subjective bias and consider information with an objective eye.

As simple as that sounds, it is in fact one of the most difficult aspects of paranormal investigation. The decision to investigate the paranormal typically implies belief in the paranormal, a willingness to accept paranormal explanations for unusual circumstances. This can undermine any attempt to drill down to the truth of a situation, if an investigator is willing to stop where personal preference takes hold.

This does not have to be a problem, however. There are plenty of religious scientists in the world, happily believing in the divine without letting those beliefs get in the way of objective analysis. They do not simply declare that a chemical reaction occurred because “the Holy Spirit made it so”. They attempt to identify and understand the mechanism of the reaction.

The common way to approach such a problem is called scientific or “critical” thinking. Critical thinking is something any investigator can apply to any situation. That type of thinking is consistently applied in the scientific field, especially when attempting to identify an unknown. Since paranormal investigation is all about identifying (or simply observing) the unknown, the applicability of critical thinking is fairly obvious.

Unfortunately, many investigators shy away from critical thinking because it is used as a bludgeon by skeptics. Skeptics love to point out that critical thinking leads to the inevitable conclusion that the paranormal does not exist. Unfortunately, skeptics fail to realize that they are themselves misapplying the principles of critical thinking in the process. Such skeptics fall into the same subjectivity trap as the believers who choose to accept their own conclusions before walking in the door.

First and foremost, the investigator must walk into a situation with an open mind. That does not mean they should be ready to accept a paranormal explanation. It means they should be ready to accept any explanation, mundane or otherwise. Instead of looking for signs of possession, they should begin with the basic principles of investigation mentioned in the first article.

Once the context of the reported paranormal event is documented and studied, the investigators

can begin applying critical thinking to the situation. The specific context of the reported activity will be vitally important. The goal is to apply the concept of “process of elimination”. For example, we can consider the situation where a client mentions that every so often, seemingly at random, the door on the right side at the end of a long hall will close on its own. The building is perhaps 100 years old and has not been upgraded much over the years. Others have mentioned that the door seems to close more often during the day than at night, but details are sketchy.

Assuming that the initial investigation produced no reason to question the honesty of the client, how would critical thinking be applied to the situation? One would presumably study the door and determine what kind of force, and in what direction, would need to be applied to close the door under normal circumstances. If you don’t know what the explanation needs to cover, in terms of behavior/activity, it’s impossible to draw a proper conclusion.

Perhaps it is noted that the door swings into the room on a slight slant, away from the hall, so that it would naturally rest against the wall and not the frame. This eliminates gravity. What other force might be applied to the door to make it close? Air currents could be a possible explanation. After all, if the door closes more during the day, perhaps the client keeps a window open in the room until after sundown. But what if the room has no window? Could open windows in the hall create enough of a draft to pull the door closed, against the pull of gravity?

This process of elimination is the key to the ongoing investigation. The most obvious explanations should be considered first. In the case of the door, a hypothetical statement could be made going into the first step of the process: “Gravity causes the door to close because settling of the house placed the frame on a slant towards the hall.” Then it’s a matter of testing that hypothetical explanation. In the case of the example, that explanation was determined to be false. A new hypothetical explanation had to be considered and tested.

Of course, what if gravity had caused the door to close? Would that have been enough to put the matter at rest? For some, that might be the case; however, the true conclusion is that “gravity can cause the door to close, but other causes may exist”. This is because of a basic scientific principle: no amount of evidence can prove a hypothesis; it takes only one experiment to prove a hypothesis wrong. An explanation is only as good as the data supporting it.

Taking that into account, the investigator should test the possibility that gravity is not the only cause for the movement of the door. It will not be difficult to do so. For example, the investigator could prop the door open with a doorstop and observe whether or not the door still manages to close. If not, then the data suggests that gravity was the root cause. If the door still closes “on its own”, then the hypothesis is wrong and a new explanation must be developed and challenged. This is called the “scientific method”. It is at the heart of all scientific methodology. To conduct a scientific investigation of reported paranormal activity, the principles of critical thinking and the scientific method should be applied. This will never disprove the possibility of spiritual activity, but it will provide data suggesting that a mundane explanation is far more likely if the investigators can build an experiment around the client’s story.

Of course, not every situation is that straightforward. Sometimes the paranormal activity is too varied, or the kind of activity cannot be tested so easily. It might be necessary to gather more information. Even in the case of a simple experimental model (like the example of the moving door), each and every step needs to be observed to ensure that the conditions of the test are understood and the results are verifiable.

Observation is so vital to any scientific investigation of the paranormal that it is the natural next topic for discussion.