

Ask for the Evidence

Lynne Explains



Skepticism is a protection against being exploited emotionally and financially. If a claim seems to defy known science and contradict what you are being taught, then that is the time to be skeptical. Not to reject out of hand – that is being “cynical” - but to apply scientific method. Ask for the evidence.

All you need to do is relate what you do in the classroom to what you read about in the press or see on TV. For example:

Suppose a photograph in the newspaper shows men cross-legged and floating above the ground. They are levitating – poised mid-air with no means of support. No force is balancing that of gravity.

If gravity is unbalanced, then the levitator must fall. And fall he does. No-one has yet demonstrated such levitation. The photographs are taken of people bouncing up and down on a mattress in the lotus position. Freeze the frame and they appear to be levitating. And some organisations often publish those pictures. Sad, isn't it?

Suppose there is a photograph of a light in the sky. It cannot be identified, so it is certainly an Unidentified Flying Object, but that gives no reason to assume it is an alien craft. How many people would link that to your science lesson on refraction and total internal reflection? An inversion layer in the atmosphere traps a cold layer of air beneath a warm one, just like the more dense water in a swimming pool beneath the less dense air. Look up from the bottom of the swimming pool at an angle and you will see images from the other side of the pool reflected from the surface of the water. This is just the way many bright objects, anything from Venus to advertising lighting, can be reflected from an inversion layer in certain weather conditions, giving an unidentified object which appears to be flying. But how many people look up and exclaim: “*Wow, I wonder if that's a total internal reflection from an inversion layer!*”

There is an exotic looking native in a trance trotting across a pit of burning coals, which should burn him. But he emerges unscathed. It should burn him, shouldn't it? Not if you have listened hard in your classes on heat and temperature. High temperature does not mean high heat transfer rates. It takes energy to burn, not temperature. Understand that topic and you will realise anyone can trot across such a pit of coals and not be burnt. No trance is required.

There is a psychic reading minds. If that is possible, there must be some kind of link which is, as yet, undetected by science. That is a very good reason to ask: can this be done by other means? Yes, many, many other means. Most are in the hands of good magicians who specialize in an area called mentalism. Go and see a top notch mentalist perform and then decide if you could be fooled by such tricks. Scientists are trained to study Nature, who confounds and confuses, but she does not lie. A scientist will be fooled by a good magician. To be sure the psychic is telling the truth, you need someone trained in deception – another magician. If cheating is involved, the testimonial of a scientist alone is not enough.



Lynne Kelly giving a fake psychic reading, far more believable than any 'real psychic'.

So the claims go on and so the mystery abounds. Why debunk such claims? Why spoil the fun? Because science will offer you far more wonder and awe if you are willing to put in the effort. Sadly, too many are not.

There is so much we don't understand. So much to learn. Maybe there will be visitors from other worlds. What an exciting day that would be! But we can't be sure until we have evidence better than a blurred photograph or some fake film of an alien autopsy.

Maybe we will be able to read minds. That would be an incredible breakthrough in our understanding of the human mind, which is still in its infancy. But we can't be sure until we have eliminated those using the conjuring trade to exploit us by fraudulently claiming such abilities.

Maybe one day we will speak to someone who has died. It would be very exciting. But first we must eliminate those who make a fortune using tricks to convince us they are talking to the dead and in doing so, exploit those who are grieving and thus so very vulnerable.

It is scientific method which tells us the difference between science and pseudoscience, the real and the unreal. Wouldn't you rather believe in things which are real?

Scientific method says that any new claim must be able to be repeated by independent testers. The way to find out the awesome realities which makes up this wonderful world of ours is through science and scientific method. Use it as your protection against being exploited.

Lynne Kelly is a teacher and the author of the skeptical novel, *Avenging Janie*. Her next book, *The Skeptic's Guide to the Paranormal*, will be published in June, 2004.

Firewalking

Gillian Investigates



"Firewalking?" I hear you all ask. Surely you have all heard the stories. A very mysterious seeming, alternate universe-type person, exquisitely clad, apart from the feet, which are bare, defying the laws of thermodynamics, and walking through hot coals, to emerge with not so much as a blister.

Incredible, you say? Perhaps. But what if I were to tell you that this is very possibly nothing more than a simple, yet very impressive looking trick, using the scientific laws of conductivity, and just a bit of showmanship? You wouldn't believe it? Well, believe it! Because it's real!

So what is the myth behind firewalking? Well, the popular myth is that what firewalkers do is, preceding the walking, the firewalker performs a meditating ritual to prepare him for the walking. It sends the walker into a paranormal state that enables them to perform this amiable feat. So says myth. But science has a better answer. And to see this we have to look at the laws of conductivity.

An example of conductivity is when you open an oven door and you feel the hot air, but it doesn't burn you, but the second you touch the grill, you feel the burn. And yet, the metal and the air are exactly the same temperature. The conductivity of any material involves how quickly heat will travel through it and transfer to something touching it. Something like a hand or a foot, for example. The metal has a much higher conductivity than does the air. But if you left the air blowing on your face long enough, the air would burn you just as much as the metal can.

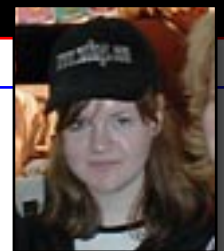
Firewalking uses hot coals and wood. Wood is a very poor conductor of heat. In order to actually get burnt by touching wood, you would have to leave your foot there for a while. Also, the hot coals are there, yes, but they tend to be covered up with a layer of dead ash, which acts as an insulation against the heat of the coals. Your feet, as well, have a layer of dead skin on them, which acts as yet another protector. So as long as you do not have your feet on the coals for too long, and the coal pit is not longer than, say, 3 or 4 metres, then they will not burn your feet.

So which is the true explanation? A test was carried out in the UK, where 3 or 4 professional firewalkers were asked to walk across a coal pit of about 12 metres. If the mythical view of firewalking is correct, then the firewalker should be able to walk across all 12 metres without burning themselves at all. Each firewalker only made it to about halfway before running off the coals with burns on their feet. This test gave some evidence that these firewalkers are either not genuine, or firewalking is nothing but a trick, now explained by science.

This magazine is one that encourages people to think scientifically whenever they are faced with a problem that seems slightly paranormal. As a writer for the magazine, I will say that firewalking, in itself, is a very spectacular-looking illusion. But so far, science has been able to prove that it is nothing more than an impressive-looking trick.

MindBody but where is the Spirit?

Belinda Visits a Festival



Last weekend, yet another **MindBodySpirit Festival** rolled around. I was very pleased, as my stash of legal "Happy High Herbs" was running low, and I needed a chance to replenish it.

Since the stallholders put a lot of work into their opportunistic – that is to say, their wonderful and enlightening stalls – I thought that those who went to the most effort should be acknowledged.

For those of you with allergies, watch out – this report may contain nuts. And if you're not sure what you're allergic to, rock up to the next Festival – there are many stalls there just waiting to test you for allergies.

Best Stall: Without a doubt "The Australian Vegetarian Society". They had information on becoming a vegetarian, dispelling all those myths about vegies only eating tofu and lentils, along with back issues of their magazine. Very interesting for anyone interested in vegetarianism.

Least Relevant Stall: "Templar Innovations", who sold "magic pens". I was at a loss as to what reason they had to be at the MindBodySpirit Festival. They could at least have spelled "magic" with a "k", to fit in better.

Best Advertising Campaign: The people at "Sweet William Chocolates" had two people walking around in spherical tangerine costumes trying to advertise their products. The tangerines were very tolerant of teenagers who wanted to poke and hug them. Two thumbs up.

Most Parentally-Embarrassing Stall: "Tantrananda School of Tantra". To see a great blush come up on your parent of choices' face, ask them what "Tantra" means. Never fails to create an awkward situation.

Stall Having The Most Fun: Who else but the good people at Happy High Herbs? There's absolutely nothing like a bunch of hippies with catnip rubbed all over them. The most comical stall there, without a doubt.

Biggest Rip-off: The several stalls charging you seventy-five dollars for a pastel drawing of your "spirit guide". How much do you want to bet that each stall's artists had completely different ideas of what your spirit guide looks like?

Most Offensive Sight At Festival: The man walking around dressed up as Jesus, who got very offended himself if you pointed out that Jesus, being born in Bethlehem, most likely did not have blue eyes and light brown hair. He worked at a stall that displayed a giant cross and had people bathing one another's feet. Religious or not, most of the Skeptics found it offensive.

By far the funniest sight that day was outside of the Festival. Two Scientologists approached the Skeptics in Chinatown, both wearing shirts emblazoned "I'm Drug Free". As we walked off, one of them lit up a cigarette.

As always, the Festival was a fun day out and a must-go for any young **Mystery Investigator**.

The Mystery of the Blindfolded Medium

Rod Investigates



A few years ago I did an on-site investigation of Camp Chesterfield, a Spiritualist camp in the state of Indiana, USA. Spiritualism is a religion that practices supposed communication with the dead, psychic readings and the like. Mediums are the people who have the apparent powers to do these things.

A favorite “power” demonstrated by spiritualist mediums is called blindfold billet reading. A billet is a small piece of notepaper an audience member writes a question or other information on. The billet is then folded up and placed with other billets from other members of the audience in a basket. The blindfolded medium then divines the contents of the billets, thus demonstrating supposed paranormal powers. The trick is very convincing and seems impossible. Until, of course, you know the secret. Since this same trick is performed by some mentalist performers, like myself, I won’t reveal the method. But here at Camp Chesterfield in a chapel nearly full of ardent believers in paranormal powers it was an incredibly effective deception.

Each audience member was invited to write on their billet the first and last name of a loved one who had passed away and a question for the medium to ask of them. Then we were to sign our first and last names. The medium placed three strips of masking tape over her eyes then blindfolded herself. The folded billets were gathered from the audience and taken to the podium.

On my billet I had written that I wanted to reach “Candy Robison” a childhood friend and cousin. I wanted to know if she had a message for me. Only about half or less of the billets got “read” by the medium and mine happened to be one of them. The conversation between the medium and me went something like this:

The medium placed my folded billet to her forehead and asked: “I’m getting a Candy. Is someone looking for Candy?”

I called out, “Yes!”

The medium said: “A last name of Robison.”

“Yes!” I replied.

“You haven’t seen this one since she was a little one, have you?” she asked.

“Yes, that’s right,” I assured her.

“Was she a relative of yours?” she asked.

I said, “Sort of. A distance relative.”

The medium affirmed, “Yes, she says she was your third cousin, twice removed. She says that she’s doing well. Everything is alright. And she says that this week will be a new beginning for you.”

I resisted the temptation at that point to tell her and the audience that Candy, my boyhood pet dog, had not been nearly that articulate while on Earth. But I valued my life, so I kept my mouth shut. All of the information I had written on the billet was used by the medium to feed back a supposed message from beyond. Shortly after my canine encounter the medium delivered a message to the lady sitting in front of me allegedly from her departed father. Using the same deception that the

medium used with my billets she moved the lady in front of me to tears believing she was in touch with her father.

At an earlier service another medium had read two of my billets; one message allegedly from a still-living friend of mine named Ray and the other from Dante, who unbeknownst to the medium, was my pet llama. In all three instances the only specific information “revealed” was what I had written on the billets. Everything else was generic information, or in the case of the “third cousin, twice removed” dead wrong, if you’ll pardon the expression.

Here was a case where a relatively simple deception – a mere magic trick – was presented successfully as a paranormal power. The reason that most if not all those in the audience “bought the lie” was because they did not examine all possibilities in an objective manner. In other words, they did not use critical thinking skills. When you see alleged paranormal powers displayed on TV or elsewhere, take a moment to ask yourself the question, “Could there be another explanation?” and you’ll be on your way to discovering the truth.

Rod Robison is a professional mentalist (a performer who entertains audiences with pseudo-mind reading skills) and resides in Arizona, USA. His website is at www.mentallusions.com



Ghost Pets? Well, they are cheap to feed!

Questions Questions Questions

Would you like to know more about investigating the strange and mysterious? If you have a question or would like to submit your own report, then just drop us an email magazine@mysteryinvestigators.com

or visit our web site at www.mysteryinvestigators.com



Aries 19 April - 13 May

You are honest, hardworking and dependable. You really need to get a life. I mean seriously! Being good is really nice but sometimes you need to have some fun. Take some time out and have a few laughs. Find a friend and catch a movie or two. Go out to dinner - you might want to avoid the lamb. Your unlucky lotto numbers this month are 1, 26 and 36.



Taurus 14 May - 19 June

Being bullish again? Don't you have a birthday coming up sometime soon? This is the perfect time to indulge yourself. Take some time out over the weekend. Get in the mood. Perhaps you could go for a stroll in the country, meet a few cows.....avoid the colour red. Your unlucky lotto numbers this month are 10, 27 and 35.



Gemini 20 June - 20 July

The duality of your personality is a huge advantage. Not only do you always have someone to talk to but when something goes wrong you also have someone to blame. This weekend give yourself a chance to find a new friend. Oh that's right! You already have one don't you? Your unlucky lotto numbers this month are 38, 39 and 40.



Cancer 21 July - 9 Aug

Cancer is the crab so you will find that like a crab you are very good at side-stepping. Getting yourself into an argument is no problem as you will always find a way to wriggle out. Avoid commitments if you are a man and avoid Cancerian men if you are a woman. Also - be aware of sharks. Your unlucky lotto numbers this month are 9, 29 and 30.



Leo 10 Aug - 15 Sept

As the Lion of the bunch you are the biggest hunter in the world. Girls.....go hunting. Boys.....keep an eye on the girls. If anyone annoys you - ROAR at them. If you aren't sure what to do - ask your cat. They are usually quite forthcoming with handy tips for living your life - Eat, sleep, ignore your owner when necessary. Your unlucky lotto numbers this month are 13, 21 and 31.



Virgo 16 Sept - 30 Oct

Everything is sweetness and light. Nothing ever goes wrong and the world is yours. You wake up every morning to the sound of birds a-tweeting and a-fluttering. This is an indication that you probably get up too early. If you believe that, you'll believe anything. Your unlucky lotto numbers this month are 2, 16 and 28.



Libra 31 Oct - 22 Nov

You like to keep things finely balanced. You will probably find that a career in accounting or banking will suit your personal style. Unfortunately this condemns you to a life almost totally without interest. Make sure you marry someone with a bit of personality. Your unlucky lotto numbers this month are 8, 14 and 25.



Scorpio 23 Nov - 29 Nov

You always have a sting in your tail. This will come in handy at work next week. Your sting will help you to hold your own in a verbal battle. In fact you are very good with words. You look good in orange and purple. Be careful taking advice from people who are colour blind. Your unlucky lotto numbers this month are 11, 22 and 33.



Ophiuchus 30 Nov - 17 Dec

Where have you been hiding? You need to get out and make your mark on the world. This is because you have been ignored for the last 2000 years or so. You'd think that since they didn't have any TV in those days they could at least get the signs right! Your unlucky lotto numbers this month are 3, 17, 32 and 37. You get four numbers because you're special!



Sagittarius 18 Dec - 18 Jan

You must aim high because this star sign is the best of the bunch. You are beautiful, tactful and everyone wishes they were you. You are revered by men and idolised by women. Children follow you around and occasionally become a real nuisance. It's really a curse to be so perfect. Your unlucky lotto numbers this month are 12, 20 and 23.



Capricorn 19 Jan - 15 Feb

Your best colours are grey and white. You have a great deal of musical talent. You might think about a career in acting, or maybe even psychic reading. I have musical talent too.....I can play the radio. Oh never mind....I'm really just making this up as I go along. Your unlucky lotto numbers this month are 7, 18 and 24.



Aquarius 16 Feb - 11 March

We are coming into the colder months so don't bother going swimming. Don't you just hate this time of year? Too cold to swim and too hot for snow. Still, the autumn colours are pretty. Hey! If you're the Water Bearer what's with this drought??? It's all YOUR FAULT! Your unlucky lotto numbers this month are 4, 15 and 34.



Pisces 12 March - 18 April

You dashing fish you! Things seem to be going swimmingly. Stear clear of fishing nets and sharks called Bruce. If you see a little clown fish called.....may I help you? You may call them "Squishy". Nemo? Where are you? Does anyone else around here speak whale? Your unlucky lotto numbers this month are 5, 6 and 19.

Hang on! That's not MY star sign. - Oh yes it is!

Behind the sun, even when you cannot see them, are the stars and constellations. The particular constellation behind the sun at the time of your birth is known as your 'sun sign' or 'star sign'. Many people don't realise that these constellations are not spread out evenly across the sky. Some are small, with the sun passing through in a matter of days, some are much bigger with the sun taking well over a month to get to the other side. And, there are 13 signs, not 12. (In fact there are hundreds of constellations depending on the culture of the earthlings looking at them.) All this is simply ignored by magazine and newspaper astrologers even though this information is freely available.