

Mr. electric's stunt turned crowds on

By JOE SCHWARCZ, The Gazette January 18, 2009

An electrifying moment - there's just no other way to describe it.

The stage lights dimmed and the music rose in a crescendo as Mr. Electric picked up a 1,000-watt light bulb and held it aloft in his bare hands. On the count of three, the bulb flashed on, illuminating the stage. No connections. No wires. No batteries. Pure magic!

There were ample oohs and ahhs from the crowd that had just witnessed Marvyn Roy's hallmark effect.

What crowd?

Take your pick: It could have been in the Lido in Paris, the Stardust in Las Vegas, the Palladium in London or in dozens of other venerable theatres around the world.

Beginning in the 1950s, and for half a century, Marvyn and Carol Roy's electric magic put a charge into audiences around the world. Ed Sullivan not only paid an unprecedented \$2,500 for the act but took the couple to the Soviet Union as part of a cultural exchange program.

Perhaps the greatest honour that can be heaped on Marvyn Roy is that his act has never been copied - an almost unheard of phenomenon in the field of magic, where imitation is rampant.

Why hasn't it been duplicated?

Simple. The act is too difficult. And too dangerous. Several hours were required to set up the eight-minute performance, to say nothing of the hundreds of hours of practice required. Besides lighting a giant bulb in his hands, Mr. Electric pulled a variety of lit bulbs from a top hat, magically materialized a chandelier and produced Carol inside a giant working bulb. As a finale, a string of dozens of glowing bulbs emerged from Marvyn's mouth, colourfully spanning the stage.

Recognition by one's peers is perhaps the most significant tribute for a magician, especially when it happens in Las Vegas, the magic capital of the world. Fittingly, in light of 50 years of magical illumination, the Vegas chapter of the International Brotherhood

of Magicians recently paid homage to 83-year-old Marvyn Roy as 2008's Magician of the Year. It was a most appropriate time for this honour, given that light bulbs and their energy requirements are a hot topic these days, as is wireless energy transfer.

Amazingly, 50 years before

researchers at MIT published a paper in the journal Science describing the lighting of a 60-watt bulb from two metres away, Roy was using a wireless energy transfer system to light a 1,000-watt, and later, 5,000-watt bulb!

The MIT scientists used a phenomenon known as resonant coupling, which has a great deal of potential for efficient wireless energy transfer. Just imagine no power lines in the street, no high-voltage towers dotting the countryside, no tangle of wires behind computers.

Certainly, Mr. Electric knew nothing about resonant coupling, so how did he become featured on billboards as "The Man Who Lights a 1,000 Watt Light Bulb with his Bare Hand?" How did he do it? Well, I don't know.

And even if I did, I wouldn't tell you. Magicians' Code, you know. Never tell.

But what I can tell you is that long before Roy's stage performance made headlines around the world, Nikola Tesla may have performed a far more impressive feat. In 1899, in Colorado Springs, Colo., using a device that generated 100 million volts of very high frequency current, Tesla lit up a bank of 200 light bulbs at a distance of 42 kilometres! I say "may have" because although the event is widely reported in books and articles about Tesla, there seems to be no reliable eyewitness account of the epic moment.

While Tesla's wireless lighting of the bulbs 42 kilometres away is questionable, there is no doubt that the high voltage coil the inventor developed can light a fluorescent tube held in its vicinity. Tesla himself demonstrated this effect in many a public presentation, and today it is standard fare in many science museums.

It seems absolutely magical, so it comes as little surprise that magicians have adapted the Tesla coil for the stage. "Mental Power Effect" is commercially available and allows the performer to place a fluorescent tube on a special table and pretend to light it by the "power of the mind." It's a neat trick but not nearly as impressive as the floating light bulb created by robotics expert Jeff Lieberman for an exhibit in Barcelona, Spain.

Those of you versed in magic will think, so what?

Harry Blackstone thrilled audiences with his floating light bulb 75 years ago, but that was different. It was battery powered and had lots of elaborate rigging.

Lieberman's bulb really floats in mid-air thanks to a concealed magnet in the bulb and a nearby electromagnet. And it is lit wirelessly using hidden receiving and transmitting

coils, very much in the fashion of recharging an electric toothbrush. The principle is "inductive coupling." When a current flows through a coiled wire, it induces a magnetic field around the wire. Placing a second coil in the magnetic field then induces a current in that wire. In the case of the toothbrush, this induced current charges the battery; in the case of the bulb, it causes the filament to glow.

Interesting, but still not quite as captivating as Mr. Electric's bare-handed heroics - especially on that evening in 1998 at the Fabulous Palm Springs Follies when the magician literally set himself on fire while performing the "1,000 watt."

Seeing smoke billowing from the performer's pants, quick-thinking stagehands doused him with a champagne bucket full of ice water. After Marvyn had cooled down, a clever emcee, capitalizing on the scene, brought him out for a curtain call as "The Man Who Sets Himself and His Butt on Fire Nightly." Well, it wasn't nightly but Mr. Electric was burned on many occasions performing the wireless bulb stunt. If he were still performing today, environmental correctness would dictate a switch to safer, energy-saving compact fluorescent lights (CFLs).

But would Mr. Electric then have to worry about problems such as migraines, lethargy or skin rashes that some claim can be attributed to the new-fangled bulbs?

We will try to shed light on such questions next week.

© Copyright (c) The Montreal Gazette