

'Twas Brillig...



The Wizards of OZ

The skeptics at the Observatoire Zététique conduct an exemplar investigation of a paranormal phenomenon
by James Randi

A GROUP IN FRANCE KNOWN AS THE Observatoire Zététique (Skeptical Observatory, shortened to "OZ" as an inside joke) has just published the detailed results of a comprehensive experiment designed to test the claims of "Therapeutic Touch" made by a sincere practitioner of this "alternative" treatment who they compassionately refer to only as Mr. Z. This report, which can be seen in English with full illustrations, is a must-read for anyone interested in the proper way of setting up and conducting a fair and definitive test. See it at www.observatoire-zetetique.org/divers/oz-rt2004.pdf in pdf format, and at <http://www.skepticreport.com> for the HTML version, courtesy of Claus Larsen. This is such a good example of how to test a paranormal claim that I would like to summarize it here.

OZ was contacted in June, 2003 by Mr. Z, who claimed he could detect a "signal" or "fluid" with his hands. They proceeded to observe Mr. Z's actions in order to determine the best method to test him. It seems that the "fluid" is sensed by Mr. Z near the pathological area or its source. "For example, ankle pathology can be the cause of muscular tension in the neck; thus the signal might be perceived either in the ankle or neck area. This complicates any attempt to identify the signal by comparison to objective means of observation (e.g., scanners, X-rays, MRI and so forth)." Indeed. After several weeks, OZ clarified the exact claims being made by Mr. Z:

- The signal is perceptible through clothing.
- The location of the signal is stable with respect to a single patient and for a given time period (in excess of one hour).
- The signal linked to a patient does not leave any "magnetic imprint" on the massage table (otherwise, the successive examination of two patients would be impossible in the absence of an intervening rest period).

From this, Mr. Z and OZ agreed that the following hypothesis that would be tested: "In a double-blind setting, the therapeutic touch practitioner is able to determine the presence or absence of a patient provided that he has previously identified, in terms of strength and location, the signal emitted by such a patient."

On Monday, November 17, 2003, Mr. Z tested each of

nine subjects, with the objective "to identify a person who emitted a particularly easy-to-detect signal, so that such person might later be used as a test subject for the final experiment. [Mr. Z felt he had detected a signal] for each of the participants in various places, but none of us truly stood out from the group. One of the OZ members noted the areas identified by the practitioner for each of the nine subjects." Mr. Z then agreed to a blind preliminary trial in which he was blindfolded and the subjects "passed successively under his hands again, in random order and silently. Once again, a signal was detected for each of the nine test subjects. We then proceeded to verify whether the areas indicated in the blind test corresponded to the previously identified areas." Unfortunately for Mr. Z, he failed the experiment, with only two successes out of nine attempts.

Six months later, on Monday, May 17, 2004, Mr. Z submitted himself to another test, this one more comprehensive: "A total of 100 attempts would be undertaken. The number of successful 'hits' by Mr. Z would have to exceed 65 in order to be deemed statistically significant. Our claimant confirmed that, more than ever, he desired to participate in the test and eventually see the results published."

The experiment began by having Mr. Z select a subject from seven OZ members present, based on the strength of the signal detected. Mr. Z chose "Miss C." He then selected his two examiners, "Mr. A" and "Mr. B," based on the weakness of the signal detected (explaining that he did not want the examiners' signals to interfere with the subject's signal). OZ began by determining that Mr. Z felt he could detect Miss C's signal through a folding screen. An opaque cloth was then placed over the screen so Mr. Z could not see through it, and he then confirmed that he could still detect Miss C's signal. Noise-attenuating ear muffs were then placed over the ears of Mr. Z and the two examiners.

Miss C was then moved into a room and the now opaque folding screen was placed into the frame of the room's door. Miss C and a designated assistant were in the room, while Mr. Z and his examiners remained outside the room. The protocol called for Miss C to place herself in front of the opaque screen or away from the opaque screen, depending on whether a "1" or a "0" was

selected from a pre-drawn sheet of 100 1's and 0's. Miss C was given 10 seconds to position herself (or not) in front of the opaque screen, after which Mr. Z would take as much time as he needed to determine the presence or absence of Miss C behind the opaque screen. This process was repeated 100 times, with all results carefully recorded and agreed upon by Mr. Z and the OZ experimenters. Only two of the 100 trials were invalidated "due to a conflict between the assistant's pre-drawn series and the indications marked by the subject."

The results were unequivocal. Out of 98 valid attempts, Mr. Z needed 64 hits (modified slightly from the original 65 because of the two invalid attempts). He got 55. The OZ researchers concluded: "The experiment did not yield a statistically significant result: *Failure*." Their final remarks reveal the care, caution, and compassion with which they conducted this experiment:

It took nearly one year, from initial contact to final protocol, for this experiment to reach fruition. Upon its conclusion, the satisfaction of having implemented a complete protocol is tinged with sadness. The protocol's results, however, can be added to a succession of experiments that, since the 18th century, have never yielded a positive result. Accordingly, we can hardly claim to be surprised.

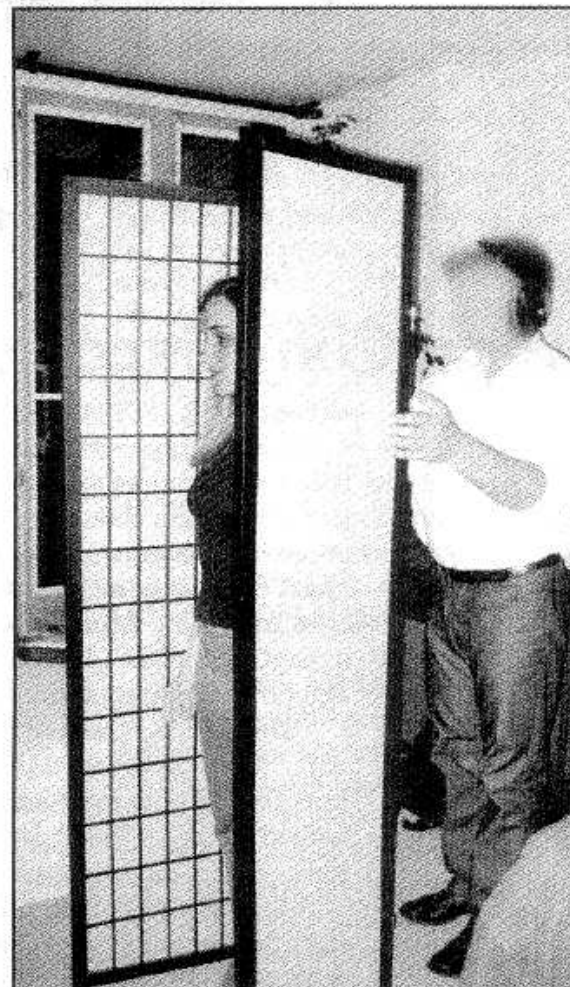
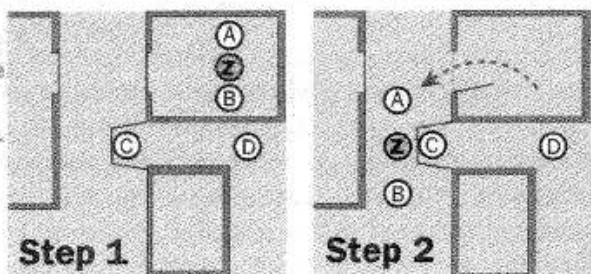
Nevertheless, Mr. Z, practices, seriously and with passion, an activity about which his patients seem to have no complaints. His surprise then, comes on top of disappointment. And since our relationship has been cordial, sincere and always marked by great mutual respect, we have great sympathy for him. When one considers the distances traversed, the hours spent sharing with us his practice and his personal understanding thereof, his firm desire to comprehend the true basis of his "perception," his perseverance despite a negative preliminary trial and the manifold doubts raised—in addition to his unflinching honesty—we are inclined to say that Mr. Z, truly has courage going for him.

I urge skeptics to follow the step-by-step procedure by which the OZ people developed their protocol, always bringing into consideration the specific needs and rather naïve notions of the claimant. OZ was careful to cover every detail of the protocol that might allow for complaints following the expected failure of Mr. Z. They maintained an atmosphere of cooperation and compliance, without compromising the security of the protocol. In summary, this is how such a claim should be tested. I'll add that if I had designed the procedure, I would have done certain things a bit differently, only in order to have more data from the encounter; I always try to provide features in the protocol that can give additional data not necessarily related to the primary purpose of the test.

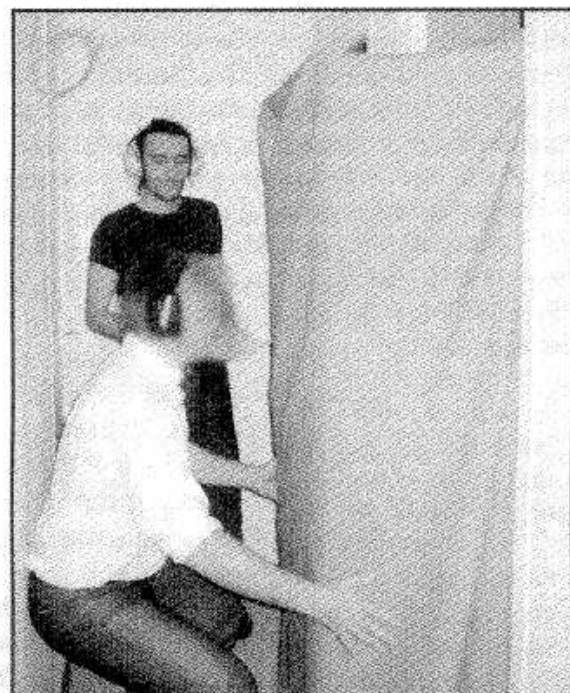
The OZ group can take top marks for this report. *C'était formidable!* ▼

Step 1: Experimenter D gestures to C to let her know if she should take her place against the screen or not.

Step 2: Mr. Z tries to determine if the field is present as experimenters A and B watch. For more details see www.observatoire-zetetique.org/divers/oz-tt2004.pdf



Mr. Z confirms that he can detect the signal of the subject through the screen.



Mr. Z attempts to determine the presence or absence of the subject.