

How Not to Test a Psychic: The Great SRI Die Mystery

This famous 'experiment' with Uri Geller seems now to have been little more than a collection of anecdotes.

Martin Gardner

Writing in *Nature* (vol. 251, October 18, 1974) on their 1972-73 experiments with Uri Geller at the Stanford Research Institute, Harold Puthoff and Russell Targ (hereafter called P and T) described one sensational experiment as follows:

A double-blind experiment was performed in which a single 3/4-inch die was placed in a 3 x 4 x 5 inch steel box. The box was then vigorously shaken by one of the experimenters and placed on the table, a technique found in control runs to produce a distribution of die faces differing nonsignificantly from chance. The orientation of the die within the box was unknown to the experimenters at that time. Geller would then write down which face was uppermost. The target pool was known, but the targets were individually prepared in a manner blind to all persons involved in the experiment. This experiment was performed ten times, with Geller passing twice and giving a response eight times. In the eight times in which he gave a response, he was correct each time. The distribution of responses consisted of three 2s, one 4, two 5s, and two 6s. The probability of this occurring by chance is approximately one in 10^6 .

Surely this experiment deserves to rank with the famous test in which Hubert Pearce, a student at Duke University, correctly called 25 ESP cards in a row as J. B. Rhine repeatedly cut a deck and held up a card. In one respect, the die test with Geller is more significant because it rules out telepathy. Of course it does not rule out the possibility that Geller used precognition or that he decided on a number while the box was being shaken and then used PK to juggle the die to that number. In any case, the

Martin Gardner's Science: Good, Bad, and Bogus (Prometheus Books) is to be published in paperback by Avon in January.

experiment seems to be a simple, foolproof, monumental violation of chance.

On the other hand, as in the case of Rhine's informal account of Pearce's equally miraculous run of 25 card-hits, P and T describe the die test with a brevity that seems inappropriate for so extraordinary a claim. We are not told who shook the box, where or when the test was made, who observed the trials, how long Geller took to make each guess, whether he was allowed to touch the box, whether there were earlier or later die-box tests with Uri, or whether the experiment was visually recorded.

When P and T released their official SRI film about their five-week testing of Geller, one of the die-box trials appeared on the film. It was accompanied by the following voice-over:

Here is another double blind experiment in which a die is placed in a metal file box (both box and die being provided by SRI). The box is shaken up with neither the experimenter nor Geller knowing where the die is or which face is up. This is a live experiment that you see—in this case, Geller guessed that a four was showing but first he passed because he was not confident. You will note he was correct and he was quite pleased to have guessed correctly, but this particular test does not enter into our statistics.

The box is seen to be a metal one of the sort used for 3-by-5 file cards. The same box appears in two photographs that accompany an article on Geller in the July 1973 issue of *Psychic* magazine (now called *New Realities*). One picture shows Geller recording his guess, the closed box near his hand. The other shows Geller opening the box to check his guess.

John Wilhelm, in *The Search for Superman* (Pocket Books, 1976) reports that he was told by P and T of many other tests they made of Geller with a die in a box. Some of them took place in Geller's motel room, with Uri doing the shaking. "He's like a kid in that he had something that made a lot of noise and he just shook it," Targ told Wilhelm. Targ also said that during the experiment reported in *Nature* Geller was allowed to place his hands on the box in "dowsing fashion."

Targ also informed Wilhelm that they had a "good-quality videotape" of another die test in which Geller, five times in succession, correctly wrote down the die's number *before* the box was shaken. "We think it's precognition," said Targ. "We think maybe even on his original experiment it wasn't that he knew what was facing up, but that he had precognition as to what he would see when he opened the box."¹

Wilhelm gives other details about the original test. Puthoff was the experimenter who usually shook the box. Many different dice were used, each etched with a serial number to guard against switching. To avoid ambiguity in guessing, Geller was asked to draw a picture of the spots rather than write a digit. "The experimenters also insist that a magician who examined the videotape of these performances found 'no way' in



Geller opening die box during 1973 experiments.

Psychic Magazine

P and T told him that Uri had found the die test difficult. It is hard to imagine that Uri would have considered the test difficult when he obtained eight hits in a row in trials that lasted less than a minute each. Nevertheless, Rogo continues, "he did only one or two trials a day over a period of a week. . . . He made a total of ten trials. . . . Only *one* of these trials was ever filmed. . . . This is the only SRI film ever made of any die-throwing tests."

Now there is a big difference between two or three days and a week. I was further mystified because Puthoff had also told Randi personally, at a parapsychology conclave in Toronto in 1981, that the die test had taken a week. Was it a week, or two or three days?

An incredible thought struck me. Could it be possible that P and T had not considered it worthwhile to keep a written record of the trials giving all the details about when and where each trial was made and who was present on each occasion? I sent Puthoff the following letter:

Dear Hal:

8 Oct 81

Your reply of 5 Oct was much appreciated. I did not even know, until I got your letter, that you were the experimenter in these tests.

May I assume from your statement of "two or three days" that the trials were not recorded and dated when they took place? It is the only way I can explain the ambiguity. (Rogo, by the way, in the latest issue of *Fate*, reports that he was told the trials took place during a period of a week, which only adds to the confusion.)

examined the film? They could not have included Milbourne Christopher, a professional who visited SRI, because he has told me he saw no film of the die test. There are only two possibilities. One is Targ himself, who had a boyhood interest in magic. The other is Arthur Hastings, a close associate of P and T and a strong supporter of their work. P and T used him frequently as a judge in their remote-viewing experiments. Hastings claims some knowledge of conjuring techniques, but in my opinion his knowledge is extremely limited.

In the fall of 1981, almost ten years after the die test, Puthoff finally revealed an astonishing fact. No film or videotape was ever made of any of Uri's eight successful guesses!

This revelation came about only because Randi, in his latest book, *Film-Flam!*, concluded, on the basis of privately obtained information, that the episode on the SRI film, showing Uri passing, was a reenactment of the experiment. Both Puthoff and Zev Pressman, the research engineer who made the film, have since vigorously denied that it was a reenactment. In reply to an inquiry, Puthoff unequivocally told me in a letter (September 10, 1981): "Only one trial was filmed, and that is the one that appears on the film . . . the entire series of trials was *not* filmed."

Why? Because, Puthoff explained, Pressman's filming was done primarily to record PK efforts. As the Christmas holidays of 1972 approached, Puthoff said, they decided to "slip" in some die-box trials, "without making a big deal of it," to see if Geller could succeed in a pure clairvoyance test. These trials, Puthoff added, were "spaced-out over a few-day period" just before Geller left. When Puthoff saw they were getting hits, he decided that a film record of their protocols would be useful. Puthoff asked Pressman to make the record and he came over to do it. "We broke up for the holidays," Puthoff continued, "assuming that eventually we would get more trials on film, but we never came back to it, going on to other things. . . . I hope this clears it up for you."

Well, not quite. It seems passing strange that in a test of this importance P and T would see fit to film only the single trial on which Uri passed. Moreover, I was puzzled by the vagueness of the statement that the test had been spaced out over a "few-day period." I wrote again on September 14 to ask Puthoff if he could recall the exact number of days. Puthoff replied (October 5) that the experiment was spread over a "two or three day period, a few trials per day, sandwiched in among other experiments, until a total of ten trials were collected." He added that the length of time per trial, "from when I began the shake to when I opened the box, was relatively short—30, 40, 50 seconds. The one you see on the film is quite typical, and it is well under a minute."

I had asked for the "exact number" of days, but Puthoff's answer of "two or three days" was almost as vague as his "few-day period." D. Scott Rogo, writing about the die experiment in *Fate* (November 1981) said that

Perhaps I have regarded the test as more significant than it was considered at the time—especially since it ruled out the possibility of telepathy. If the die test was considered not important, and made more or less at random, with no keeping of records, then I can understand the confusion over the number of days. . . .

My assumption, Puthoff replied, was dead wrong. “Careful records were kept.” He said he had now checked those records and determined that “the trials were carried out over a three-day period.” Wilhelm, he added, confused two separate die tests. One was the test reported in *Nature*, of which only the passed trial was filmed. It used a red transparent die. Later a series of similar tests were carried out in a motel room in San Francisco when they were there for the *Psychic* article. These were videotaped. Puthoff closed by saying that he continues “to entertain Randi’s hypothesis” but considers it ruled out by the SRI film. “Go back and view the film—that’s what we have to deal with.”

I found it curious that Puthoff would place any value on the filmed trial because, assuming Geller used a peek move for his hits, he obviously would not use it when being filmed. I wrote to Puthoff again (October 18) asking him if I could pay for the cost of having the original records photocopied. This is how I justified my request:

In the interest of seeking the truth about this historic test (in which the results were so unambiguous and so overwhelmingly against chance), it would be enormously helpful to see these records. I want to be completely open. I know a great deal about dice-cheating techniques, and it is my belief that Geller did indeed peek by a method similar to the one Randi conjectured. The written records may cast no light on the matter, but at least they could be of help in pinning down the exact protocols.

The letter was never answered.

What conclusions can we reach from all this? The most important is surely the following. What seemed to any reader of *Nature* to be a carefully controlled die test has now become little more than a collection of anecdotes. At the very least P and T should make a full disclosure of all the details of the test, including photocopies of whatever records were made at the time. We also should be told the results of the videotaped tests made in San Francisco, and whether Wilhelm was accurate in reporting that a videotape was made of a successful precognition test with a die and box.

As it stands, the ten-trial test at SRI should not be called an experiment. There were too many ways Uri could have cheated (the peek move is only one)—ways that could be ruled out only if a knowledgeable magician had been present as an observer, or if a videotape had been made of all ten trials from start to finish, with no time breaks. In the absence of such controls for guarding against deception by a known charlatan, the die

test was far too casual and slipshod to deserve being included in a technical paper for a journal as reputable as *Nature*. It belonged more properly in a popular article for *Fate*.

Notes

1. Both P and T are strong believers in precognition. Indeed, this was the topic of Targ's paper, "Precognition and Time's Arrow," delivered at the 24th annual meeting of the Parapsychological Association, at Syracuse University, August 1981. Targ gave his reasons for thinking that precognition does not violate quantum mechanics and that it could be explained only by assuming time-reversed causality. He defended Helmut Schmidt's experiments that supposedly confirm backward causality, and cited William E. Cox's paper on precognition in the *Journal of the American Society for Psychical Research* (vol. 50, 1956, pp. 99-100), reporting a study of 28 trainwrecks that occurred between 1950 and 1955. Cox concluded that (in Targ's words) "significantly fewer people chose to ride trains on days when they were going to crash, than rode them on previous corresponding days of the week in earlier weeks or months."

2. Here is how Wilhelm reported what P and T told him about this die test (*The Search for Superman*, p. 95):

"We only talk about the more conservative miracles," muses Targ. "We have another tape of Geller that's not reported because it's more outlandish. We have a very good-quality videotape in which Geller, on another visit, said, 'I don't want to repeat that, I have a new way of doing that dice experiment.' The new way is to write down on a piece of paper a number on the table. Then I [Targ] take the box and shake it vigorously. Then he takes my shaken box and he shakes it vigorously, dumps the dice out on the table, and it comes up the number he wrote down. We did that five times in a row."

According to Puthoff, the dice was thrown "way up in the air, landing on the table, bouncing all over, and then coming up the [guessed] number." The die belonged to SRI.

In view of the fact that this entire test was videotaped, in contrast to the original test, which was not, it was a much better controlled test than the one reported in *Nature*. Does a tape of this test exist? If so, why has it not been made available to psi researchers? ●

As long as people believe in absurdities they will continue to commit atrocities.

—Voltaire

A man does not attain the status of Galileo merely because he is persecuted; he must also be right.

—Stephen Jay Gould, *Ever Since Darwin*