

Does God Play Dice With The Universe?

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The following story actually happened.....

In 1990 I decided to re-enroll in graduate school at Western Kentucky University. I had first enrolled in the fall of 1980, right after I had graduated from Western with a bachelor's degree in mass communication. My graduate major the first time had been communications, but after two excruciating semesters I decided to quit. Ten years later I was working for the Pennyroyal Center. I made the choice to return to graduate school, this time part time and this time to pursue a master's degree in health administration.

I was told I would have to call the graduate school at Western and change my major, since officially I was still on the books as a communications major. Eventually, I got around to this. After I explained my situation to the lady on the other end of the line, she surprised me by saying "Oh, I've already taken care of that. I did it this morning." "I don't think so," I said. "This is the first time I've called your office." "What was the name again?" she asked. I told her again. Her response: "I'm sure I took care of that this morning."

She then asked for my middle name, which is Steven. It was only then that the truth revealed itself. A Mark William Lovely had called the graduate college that morning for the exact same reason, except that he wanted to change his major from health to communications. I peppered the woman with questions about the other Mark Lovely, but she had already sent the paperwork on to

another department and could tell me very little. Together we marveled at such a coincidence. What were the odds that another Mark would call the same woman on the same day for the same reason? What's going on here??

Coincidence: The striking occurrence of two or more events at one time, apparently by mere chance. The chance occurrence at the same time or place of two or more events that appear to be related or similar.

Last year, before my wife Teresa became my wife, she went to Palmdale in Southern California to visit her sister and also to take a certification test at UCLA. On her way to the airport for the return trip, her sister and family insisted she stop at the local Palmdale newspaper and put in an application for a job there. While chatting the receptionist noticed that Teresa had a slight southern accent and asked her where she was from. "Oh, I'm sure you've never heard of it. I'm from Hopkinsville, Kentucky, she replied." Teresa was astonished to hear the receptionist say "A man from Hopkinsville, Kentucky, saved my life." As it turns out, the woman had gone to the University of Kentucky in the late 1950s. One night at a fraternity party, she sped off in a car driven by her upset (and possibly inebriated) boyfriend. The car hit a tree head on just down the street from the fraternity house. The first person there was Jimmy Drury, who performed lifesaving measures and got her to breathing again.

Again, what are the odds? That a woman would travel all the way across the country and end up talking to someone whose life was saved by her fiancée's landlord??

Probably, each person in this room can tell his own story about a striking coincidence. Some more amazing than my own. And that is the point of this paper. Are amazing, seemingly meaningful coincidences more common than they should be, given the laws of chance? Does this indicate an unseen force of some kind in the affairs of mankind? Or are such conclusions a byproduct of a human mind which tends to see pattern where none objectively exists?

What about everyday types of coincidences? When I was younger I noticed something very strange. Several times I would learn a brand new word, say something fairly unusual like "misanthrope," then for some reason I would hear that word several times during that same day.

Ever see a long lost friend that you just happened to mention in a conversation the day before? Ever read a word or the name of a celebrity and hear that same word or name that same instant in conversation or on television?

It's all just chance right? Or is it?

Famous Swiss psychologist Carl Jung called such coincidences synchronicities. He described one in his 1952 book *Synchronicity: An Acausal Connecting Principle*....

“A young woman I was treating had, at a critical moment, a dream in which she was given a golden scarab. While she was telling me this dream I sat with my back to the closed window. Suddenly I heard a noise behind me, like a gentle tapping. I turned round and saw a flying insect knocking against the window pane from outside. I opened the window and caught the creature....It was the nearest analogy to a golden scarab that one finds in our latitudes....which contrary to its usual habits had evidently felt an urge to get into a dark room at this particular moment.”

The incident convinced Jung that some greater reality existed that linked these coincidences together. He said “The more they multiply and the greater and more exact the correspondence is, the more their probability sinks and their unthinkability increases, until they can no longer be regarded as pure chance but, for lack of a causal explanation, have to be thought of as meaningful arrangements.”

Austrian biologist Dr. Paul Kammerer argued in 1919 that coincidence is the manifestation of a natural principle that operates independently of any known causal explanation. We find such a concept hard to accept. Our minds are taught to think in terms of “cause and effect.” Yet we all

know that things happen all the time which appear to have NO cause. Perhaps there are yet-to-be-discovered principles underlying these occurrences. This is what Jung meant by synchronicity.

Consider the following examples:

On May 3, 1944, the crossword puzzle in the London Daily Telegraph carried the following clue for 17 across; "one of the U.S." (four letters). On May 23 another clue read "Red Indian on the Missouri." On May 31 one clue read "This bush is a centre of nursery revolution." On June 2 there were two further clues: "Britannia and he hold to the same thing" and "But some big-wig like this has stolen some of it at times." The answers, in order, were Utah, Omaha, Mulberry, Neptune and Overlord. The crossword puzzle had, over a period of 31 days, revealed five of the top secret code words for the D-day invasion set for June 6. Military intelligence swooped down on the newspaper's offices expecting to unmask a spy who was busy sending messages back to his masters in Berlin. Instead they found Leonard Sidney Dawe, a teacher who had been composing crosswords for the paper for 20 years. It was all "just an amazing coincidence."

In 1974 Mrs. Willard Lovell of Berkley, California, spent ten minutes trying to find a way into her house after she accidentally locked herself out. Just then the postman came up with a letter from her brother who had stayed with her a short time before. In the letter was her spare key, which he had borrowed.

Back in 1953, Boone Aiken lost his engraved fountain pen in Florence, South Carolina. Three years later, he and Mrs. Aiken were in New York City. As Mrs. Aiken was leaving their hotel, something caught her eye. It turned out to be that same fountain pen, engraved in two places with her husband's name.

Charles Francis Coghlan was born on Prince Edward Island in 1841. He went on to achieve international fame as an actor. He was appearing in Galveston, Texas, November 27, 1899, when he took sick and died. His lead-lined casket was placed in a granite vault in a Galveston cemetery. On September 8, 1900, a great hurricane struck Galveston. Flood water washed into cemeteries and destroyed vaults. Some coffins were floated out into the Gulf of Mexico and scattered by the waves. In October of 1908, some fishermen from Prince Edward Island, Canada, noticed a large box drifting low in the water. They towed it back to shore and chipped away the sea mollusks and shells. A silver plate identified it as the coffin of Charles Coghlan, a name well known on the island. Only a few miles away was the village where he had grown up. Incredibly, he had traveled more than 2000 miles to arrive home nearly nine years after his death.

In 1950 Life magazine reported that all 15 members of the choir at a church in Beatrice, Nebraska, were late to choir practice on the evening of March 1.

The minister, his wife, and daughter were late because the wife decided to iron the daughter's dress. One girl waited until she had finished a geometry problem. Another couldn't start her car. Two lingered to hear the end of an exciting radio program. A mother and daughter were late because the mother had trouble getting the daughter up from her nap. There were ten very ordinary reasons that those 15 people were late to choir practice that evening. However, it's a very good thing they were because five minutes after choir practice was scheduled to start their church was completely destroyed in an explosion related to the heating system.

The members of the choir chalked up their good fortune to an act of God. That's certainly a possibility. In any event, a mathematician—Warren Weaver—calculated that there was about a one in one million chance that all of the ten reasons for lateness would happen on the same evening.

Chance...Odds...Probability...What parts do these play in all these events? Perhaps we should ask the statistics teacher at the University of Warwick in England. At his very first lecture, to illustrate the laws of probability to his students, he removed a coin from his pocket and tossed it into the air. It landed on a polished floor, spun around a few times and, to a thunderous applause, came to rest vertically on its edge! By doing so it beat out one billion to one odds.

Men of science long ago provided the answer to incredible coincidence. In an address to the British Association for the Advancement of Science it was stated “If six monkeys were set before six typewriters, it would be a long time before they produced by mere chance all the written books in the British Museum; but it would not be an infinitely long time.”

Well, I guess that depends on your definition of “infinitely long time.” One research estimated that if a monkey were at a keyboard continuously and somehow could type ten strokes per second, it would take from the beginning of the universe to now to get the first four words of the phrase “To be or not to be?”

As a practical matter then, is the event even possible? Just because an event can be made possible mathematically, does that make it also a possibility in the real world? If we account for real world factors—such as the fact the monkey would get bored and refuse to cooperate—maybe the event really is NOT possible, despite the math. Is this why we often hear the term “theoretically” possible?

My point is this: Are coincidences dismissed too readily because we think of them as more possible than they really are?

What are we to make of the observation by a university math professor? He noticed that earlier pages in books of logarithms kept in his college library were dirtier than later

ones indicating that, for some reason, students had more occasion to calculate with numbers beginning with one than with any other number. Theoretically, each digit from one through nine should occur equally. But he found that 30 percent of the numbers were one and only five percent were nine.

How can we explain Scott Palmer? Mr. Palmer, a Californian and an author, made headlines in the early 1980s for making 18 holes-in-one during a single year. Plus, his shots hit the pin some 50 other times. He got so tired of being disbelieved that he rounded up 65 eyewitnesses with affidavits to back up his claim. Four of the aces came on consecutive days in October of 1983. Scott started taking lessons halfway through his streak, so instead of hooking holes-in-one, they started to go in straight. All but one of the 18 came with the same apparently indestructible ball, a Top Flite XL No. 2. He was offered more than \$14,000 for it.

In Bermuda two brothers were killed by the same taxi and driver. The brothers were riding the same moped and the taxi had the same passengers. The only difference was that the deaths occurred a year apart.

It seems to me that there are really only three possibilities regarding coincidences: 1. The connections are all illusions based on a human inclination to place information into categories and patterns. 2. God, or some other higher power, sometimes puts events into a pattern for us to

discern some meaning—although not always a clear meaning. 3. There is some natural force loose in the universe which connects us all and therefore the events surrounding us.

Let's look closely at this last possibility. Is there any real scientific evidence to back it up? From what I read, the answer is an unequivocal Yes!

I find the world of physics extremely interesting, though it is a subject which definitely does not come easy to me. I have to read explanations of basic principles over and over again before they begin to "take." This is especially true when it comes to the world of quantum physics, or quantum mechanics.

The Theory of Relativity by itself is enough to bring on a major headache. It's principles, now mostly proven, simply go against the grain of what we have naively come to think of as "common sense." Well, quantum mechanics is truly "through the looking glass." No less an authority than esteemed physicist Richard Feynman said "I think I can safely say that nobody understands quantum mechanics." And so I'm not going to try to explain it here tonight; just tell a few pertinent conclusions that scientists have drawn. It was Max Born in 1926 who first put forth the idea that a subatomic particle cannot be pinned down to a specific place and time between observations. That instead you could only predict where it might be by using mathematical probabilities. It was then that Einstein issued his now-famous declaration, "I shall never believe that God plays

dice with the world.” Quantum uncertainty eventually won the day however.

To vastly over simplify, there is something called the “observer effect.”

As unbelievable as it sounds, particles seem to know when they are being observed. One cannot even claim that these particles—any particles of matter—even exist outside of our observation of them. Somehow, through the act of observation, subatomic particles are briefly summoned out of a kind of mathematical never-never land of potentiality and possibility into the solid world of tangible things and events. In quantum parlance, an observation results in the “collapse” of the wave function; an instantaneous telescoping down of the probability to a localized point, a real particle.

What constitutes an observation? The most accepted theory is something called the Copenhagen interpretation. This states that an observation is any registering of an event, such as the reading of an instrument, **IN THE MIND!**

This is a staggering conclusion, especially when one remembers that all the material of the universe is comprised of subatomic particles. Unbelievably, our most fundamental branch of hard science implies that what had previously been thought to be a concrete, objective world cannot even be said to exist outside of the subjective act of observation. This means it is the mind which serves as the

essential link between mathematical possibility and physical reality.

Does anyone here truly understand this and, if so, could you please explain it to me? The best minds in the world today are saying that human consciousness has an intimate relationship with the workings of matter. Is it that much of a stretch to say that it also affects events, both personal and societal?

In 1977 an experiment at the University of Texas showed that the decay of a radioactive particle is suppressed by observation, and when observation is continuous decay simply doesn't happen. It appears that it really is true that a watched pot never boils.

Extensive experiments have been done at Princeton University with random number generators. These machines are essentially computerized coin flippers and generate either a one or a zero in long continuous series. In trials which have been duplicated elsewhere they have shown that the ones or the zeroes can be made to come up more often solely by the INTENTION of the person operating the machine. The results are conclusive and far beyond anything expected by chance. The amazing idea is that the person at the machine is causing it to come up heads more often or tails more often.

The implications are enormous. Could coincidences be caused by our own thoughts? Do we draw events to us and

in a subtle way even control matter to a certain extent? Does this explain “the power of positive thinking?” Is there now a scientific basis for ESP, the power of prayer (also proven in recent experiments), even Murphy’s Law???

Some scientists speculate that there is in fact a field of consciousness that everybody and everything is somehow a part of; that the brain doesn’t create consciousness it only plugs into it. This idea could even serve as a scientific framework for near death experiences and reincarnation.

David Darling in his book “Zen Physics” puts it this way: “Every thing and every event in the universe seems to be attached to an all-embracing, quivering web that interconnects it with every other thing and event. Nothing stands apart. The cosmos as now portrayed by relativity and quantum mechanics is less like a loose collection of jiggling billiard balls and more reminiscent of a single, giant universal field—an unbreakable unity which Alfred North Whitehead dubbed ‘the seamless coat of the universe.’”

In his last book noted scientist and unwavering skeptic Carl Sagan had this to say: “At the time of writing there are three claims in the ESP field which in my opinion deserve serious study: (1)That by thought alone humans can (barely) affect random number generators in computers; (2)That people under mild sensory deprivation can receive thoughts or images projected at them; and (3)That young

children sometimes report the details of a previous life, which upon checking turn out to be accurate and which they could not have known about in any other way than reincarnation.” Carl Sagan said this. Carl Sagan!

I'll leave you with one final coincidence: A woman in an office desperately needed to get in touch with her partner. It was an emergency. She couldn't get the fax machine to work. She hated to call him at home on his day off but she couldn't think of what else to do. So she got out his file and dialed his home number. “How did you know where I was?” he exclaimed. “What do you mean?” she said. It turns out she had not dialed his home number, but in fact his seven digit employee number. Of course it was the number to a pay phone in town. Of course he was walking by and answered it.

What are the odds??