

The Paradigm Discourses

“Numbskull”

If you try to fail, and succeed; which have you done?

“Ladies and Gentlemen,” - dramatic pause - “allow me to direct your attention to the center ring.” Reason’s voice rang out. Paradigm was watching but musing as well; where did he ever find a 10-gallon black hat? He had the circus tent announcer idiom down pat.

“Tonight, our team of wizards extraordinaire have prepared a visual and conceptual feast not witnessed by mortal eyes since Merlin conjured the dreaded dragon *Sizzle Paws* from the depths of Hades.” Reason winked at Curiosity who had dressed for the demo.

“You see before you not one, but two 9.6 ls envelope conveyers, marvels of quantum engineering, arranged at a gentle but precisely calculated angle. On the first you can see dazzling blue envelopes travelling left toward Proof, and vibrant red envelopes travelling right toward where the conveyers meet, while on the second, the blue envelopes travel right, and the red envelopes travel left toward Logic.

“And now, I need a volunteer from the audience.” Strolling over to Dogma, he extended a commanding arm, “You, good sir, a gentleman of obvious breeding, intelligence, analytical rigor and overly developed sense of order, we need you here.” Without giving him a chance to decline, Reason escorted him to the open side between the two pairs of tracks to an ornate box with two large input chutes and an even more outrageously large and brightly colored lever. Under each chute was a glass window which showed a pair of clear tubes wide enough to hold a stack of coins. The tubes were initially empty. Paradigm couldn’t help but wonder if Reason had actually acquired it from a clown. Reason positioned Dogma halfway between Logic and Proof but with his back to Logic and his front to Proof.

“Now good sir, your job is simple; from time to time simply move the lever from one position to the other.”

Dogma, “I don’t understand. What does the lever do?”

Reason placed a kindly arm around Dogma’s shoulder, “My dear champion of causality, endorser of effects, advocate for action, promoter of place-schemes, this is a paradox lever. In the PO paradox position, it makes the temporal loop causally contradictory in the platinum/osmium basis – a logical contradiction. In the GS paradox position, it makes the temporal loop causally contradictory in the gold/silver basis – again, a logical contradiction. We are trying to break the Realm, to thwart the intended communication from the present to the past. Our goal is to create a temporal paradox. Our objective is failure.”

Dogma acquiesced. He kept mumbling to himself, ‘No stonewalling, no stonewalling.’

Reason, gravely, “We begin.” He started both tracks.

As soon as the first envelopes arrived at the end of the tracks, a most amazing thing happened; the envelopes opened all by themselves and out spilled gold and silver coins. Sometimes the coins matched, sometimes they didn’t, but if they matched on the first track, they matched on the second.

A gentile fan swept the fluttering empty envelopes off to one side while the coins fell directly into their respective chutes and into that ornate box with the garish ‘paradox’ lever. Through the glass windows in front the audience could watch the double pairs of tubes fill up. One chute represented the present, the other the past. One pair of tubes for *now*, one pair of tubes for *then*.

Each chute guided a pair of coins into the tubes, one coin in each tube. The coin from each envelope fell into their own tube. Each pair of tubes were side by side, so it was easy to see if each pair of coins was correlated or anti-correlated. If the pair of coins in the present tubes were correlated, so was the pair of coins in the past tubes, and of course, if one pair were anti-correlated so was the other pair. The tubes were positioned so the audience could watch as they slowly filled up.

Then, being a good sport, Dogma flipped the lever to the opposite position. On cue, the coins spilling out from the self-opening envelopes were now platinum and osmium. Even though the coin class was now different, if the present chute had correlated coins, so did the past chute, and vice versa.

The envelopes were still opening on their own, without human intervention. At each flip of the lever the coins changed types until at the end of the demo there was this beautiful matching layering of coins between the double pair of tubes. The layers matched in coin type, as well as in correlation pattern. For each coin type, for each tube, the order of the coins was random, just as many gold coins as silver ones, just as many platinum coins as osmium ones. Somehow, the present and the past had successfully maintained causal consistency, not a paradox in sight. No observer ever opened an envelope; the quantum system had measured itself.

Reason returned to center stage, “And now behold, the beauty of Quantum Temporal Paradox – Q.T.I.” and with a stern but hardly menacing look, “and I’ll sick Theory and Experiment on anyone who pronounces it ‘cutie’ – no human hands required to open the envelopes, the loop itself does that. Regardless of the lever’s position,” he touched the paradox lever that Dogma was still clutching, “one type of coin is paradoxical, the other is indeterminate, and vice versa. In either case, out pop only coins of the indeterminate type. When the paradox lever is in the GS paradox position, only platinum/osmium coins show up, and when it is in the PO paradox position only gold/silver coins show up. We have tried to create a temporal paradox, a logical causality paradox, but have failed, yet have succeeded in creating a temporal indeterminacy, complete causal consistency. Quantum magic, and some good old-fashioned circus sleight of hand, and viola, a demonstration of Q.T.I.” He took an exaggerated bow, the audience clapping enthusiastically. It was a fun and vivid demonstration of the QTP hypothesis.

It wasn’t until the very end that Dogma noticed that the ornate collection box actually had a pastel label, clearly the name of the device; a single word, it looked like.

He bent down to read it – “Numbskull.”