

March 2nd 2020

## **The Sudoku Paradox.**

*A concept regarding particle entanglement*

The curious among us observe and learn from our life experiences creating vivid memories of all we've been.

These memories become the sum of who we are.

They help us negotiate our way through what remains of our life, which at the beginning of the 21st Century is a tricky business indeed!

You'd think having access to a world-wide-web of shared information the people of our planet would get along better, but we don't.

Our divisive nature stems from the subjective perspective we adopted when we first became self-conscious.

While crucial to our early ancestors development our choice to subjugate animal instinct for free-will came with a hidden cost!

Your life, once confined by the laws of time and space, became a commodity.

It could be measured, bought and sold and will inevitably end in your death.

This perspective currently isolates almost every human on our planet!

There is of course an *evolutionary alternative!*

Fundamental aspects of our nature constantly remind us we're something more than just an isolated individual!

A sense of being between two worlds is suggested by moments of intuition, synchronicity and conscience.

We're offered no scientific explanation for these metaphysical conundrums, which is hardly surprising!

The focus required by scientists tends to isolate them within their specific field where each glimpses a specific feature of the theory outlined here.

Meanwhile, we the people languish in limbo waiting for them to get their metaphorical *acts together.*

Overwhelmed by life we resign ourself to the treadmill, distracting ourself with whatever pleasures and addictions our niche allows, seldom mentioning the strange *other worldly* sense that haunts us.

It is the elephant that sits quietly in the corner of our room.

Time passes, globally divisions escalate, everyday our room becomes smaller, until unavoidably we sit nose to trunk.

This particular intervention is taking place in your mind, so that's where we'll confront the pachyderm!

Imagine the elephant is on roller skates, she's quite good! So good she's playing a saxophone as she skates through a shopping mall.

You created the image of the roller-skating, saxophone playing elephant by pick-and-mixing images of elephants and roller-skates and saxophones from your memories.

I propose that although those memories were processed in your brain that isn't where they're stored.

I propose that when you recalled the memories you connected with the *actual moments* from your life when you've experienced elephants and roller-skates and saxophones.

For this proposition to be credible those past versions of *you* must still exist, which they do. You catch a glimpse of them every-time you look into a mirror.

The light illuminating your face takes *time* to reach the mirror and reflect back into your eyes, which means you're looking back in time at the person you used to be.

The speed of light isolates you as a moment in time and space within the flow that you know as your life.

The flow of your life contains all your memories, all the good and bad things you've done, everything that makes you who you are.

It all still exists just as the *you* in the mirror still exists.

This principle was established by Albert Einstein in his theory of General Relativity.

Published in 1916 General Relativity was so far ahead of its time that the consequences of what it reveals are only now being fully appreciated.

$E=mc^2$  was intended as a simple thought experiment to explain how energy and matter interact but in the process it inadvertently opened the door to our *evolutionary alternative!*

Erwin Schrödinger, having followed Einstein to that door, immediately realised the potential of what he was seeing and entered the world of Quantum Mechanics.

Here, Darwin, Newton, Einstein, Schrödinger, and a whole host of other fine fellows are all connected in one continuous train of thought ... and you can join it too!

Your ticket for the ride is a simple thought experiment that will explain General Relativity and Quantum Mechanics.

So ... All aboard!

Imagine you can vibrate at the speed of light.

When you do everything around you appears frozen in time. This happens because you're moving at the same speed as the light that's illuminating everything.

Now, from your imagined perspective increase your speed again, toward the speed of light squared.

As your speed increases you're seeing the things the light illuminated yesterday.

Your life, our history, dinosaurs, the forming of our planet, all the way back to the moment before the massive expansion that our scientists call the Big Bang.

Here, all the energy and matter that formed our Universe is unified, in one place.

Here, time and space do not exist.

To take a measurement in time or space requires two points of reference.

Here there is only one.

Here there is only the Quanta. ( In physics *Quanta* refers to the smallest possible particle of any physical property. )

It's peaceful here, we could spend some time here, but time doesn't exist ... so let's create it!

In a fraction of a second the Quanta expands in every direction pulling its entire mass with it!

This creates great heat which fuses some of the Quanta together forming fundamental particles, elements and compounds, *the matter*, that almost 14 billion years later has become you.

Now, here's the thing!

The timeless spaceless characteristic of the Quanta permeates the matter it now forms. The paradox being that although that matter is bound by the laws that govern time and space ... the Quanta isn't.

Schrödinger named this interaction *Quantum Entanglement*.

Schrödinger realised that two points in time and space might be separated by a nanometre or a billion kilometres, a trillion years or a second, it makes no difference, the Quanta connects it all.

The Quanta is first observed in matter as the Quark. It was discovered and named in 1964 by Murray Gell-Mann.

Quantum Entanglement explains all metaphysical and psychological conundrums :-

Quantum Entanglement explains how animals, birds, fishes and insects migrate although they have no previous knowledge of their route or destination: They're connected to all of their species who've gone before them.

It explains our memories and thoughts: Through Quanta we access the *actual* events.

It explains post traumatic stress disorder: We're inseparably connected to all the things we've done, experienced and seen.

Depression: We're inseparably connected to all our unresolved issues.

Dementia: When the human brain becomes dysfunctional through trauma or disease its ability to access actual past life events is compromised.

In drug induced hallucinations and dreams the events accessed through the Quanta take on a random nature which, while pertaining to a general theme, manifest abstractly in the brain.

Quantum Entanglement explains why despite decades of research neurologists are no closer to understanding how and where memory is *stored* in the brain.

Instances of *deja vu*, synchronicity, intuition and dreams make us question the boundaries of our isolated perspective.

A person viewing their life as existing separate from the Universe adopts an isolated perspective which can, by definition, only conclude in their death.

A person viewing their life from a unified perspective is unencumbered by such limitations, the whole being greater than the sum of its parts.

I know, that's a lot to get your head around!

So let's approach the matter from another angle, maybe take a biological look at how your life began.

The elements that sit on the squares of the periodic table, those inanimate pieces of matter aren't conscious but at some point in your evolution a few of them chose to get together and *become* alive!

How could that happen?

This question usually gets a sci-fi Frankenstein inspired answer in which by pure chance a lightning bolt excites elements in a primordial soup.

I, like Spock, find this "totally illogical!"

Even the most fundamental life form required the *correct* elements to form into molecules that then took the *correct* position, some of them *simultaneously*, in a DNA sequence.

This is an extremely complicated process! The chances of this scenario randomly taking place is trillions to one.

The obvious counter argument that there has been billions of years in which trial and error would eventually have got it right doesn't hold up either, there simply hasn't been enough time since the forming of our planet for that scenario to have occurred.

Which leaves the only other explanation, that the elements made a decision and *chose* life. And not only chose life but chose the fastest route possible to have you reading this text today.

So how did an inanimate element make the correct choices?

Simple!

Quanta connects it all!

Through quantum entanglement all the necessary elements were simultaneously sampling the trillions of possible combinations required for your life to begin.

Which made the odds far more favourable!

Einstein called this entanglement *spooky action at a distance*.

It's romantic to imagine the *distance* Einstein referred to as being massive!

Maybe so massive that *you* influenced the beginning of life as we know it!

Though, for the purposes of this thought experiment, maybe we should start with a smaller distance, something closer to home, but we'll stick with the romantic theme.

Let's imagine you're terribly lonely, desperate to find love. You have a vision of your ideal partner, sitting in a specific cafe at a specific time. You imagine their beauty, how they complete you, all the romantic stuff.

You wait until the time designated by your vision, you walk into the cafe and your partner is sitting there, just as you'd imagined. You strike up a conversation, fall in love and live happily ever after.

This is how spooky action at a distance works! But, in my experience, this is seldom the way we perceive it!

The reality of life is far more subconscious!

The ending *is* romantic but the way you get there ... not so much!

The image you have of your future meeting with your soul mate remains, for the most part, buried deep.

It surfaces in subtle ways, in fact so subtle you're unaware of the underlying process making you favour the mundane choices that are channeling you to your moment of serendipity in a cafe.

Permeated by waves of entangled particles and anti-particles you surf your way to your true love's heart!

Okay, so ...

In this scenario the *distance* Einstein mentioned in his *spooky action at a distance* is so minute that you remain oblivious of the underlying process at work ... and for a very good reason!

Understanding how Quanta connects everyone and everything will change your perception of who and what you are.

But first there's another paradox you have to get your head around!

There's a void between the mass of evidence that predicts the existence of Quanta and our technical ability to prove it!

The physicists at CERN continue slamming particles together in the LHC in the hope that one day they'll glimpse into that void.

One has to admire their persistence even in the face of a law enshrined in quantum physics that the attempt to observe quantum events makes said events collapse!

Making them impossible to observe beyond a certain level for a very logical reason.

I propose that the void between what is probable and what is provable creates a necessary buffer zone that ensures our evolution emerges independent of human foreknowledge and subsequent interference. For obvious reasons!

So ... Where does the information from which we choose our path to evolution come from?

Quanta!

It permeates everything throughout time and space. It bridges the buffer zone bringing us choices that emerge from the whole.

A living evolutionary algorithm that feeds back on itself collapsing upon observation.

These *choices* manifest in our senses as *primordial instincts* that then become our thoughts and finally our actions.

In such a model we are the Universe co-creating ourselves and, as such, we can only imagine where that will take us!