

THE RELIGIOUS LANGUAGE IN PHYSICS

LOOKING AT HOW WE THINK AND HOW IT AFFECTS WHAT WE FIND

BY LEO GREENWOOD

We Have The Answer

When it comes to the reality of my experience I was, for a long time, speechless. My words couldn't capture or hold what I felt, so naturally I was extremely interested in the claims of those saying they know what all of this is because I... I don't really know what it is.

My mother was a scientist and my father was raised very religiously, and each discipline had very bold claims, often contradicting one another. I gave almost all of my time to the study of religions and sciences, even rushing my University work to get back to my *real studies*. Religion claimed to know the mind of existence and physics claimed/claims to know the body. *Then I must know both if I am to know myself!*

The more I investigated the more I realised that these two intellectual fascinations were caught up in a war for the world. It was like the Harry Potter prophecy, "*Neither can live while the other survives.*" I had walked into a battle that had been raging through time with two sides adamant they are distinct from one another and hold the only truth!

What I began to realise, perhaps because I was an outsider, were their similarities, and it looked to be to the detriment of both sides to ignore them. Science, I saw, wasn't really all that different from religion and it seemed to be down to the narratives.

So there are, the story goes, four fundamental forces.

The Fantastic Four:

- The Weak Nuclear Force
- The Strong Nuclear Force
- The Electromagnetic Force
- Gravity

These forces act to 'govern' the behaviour of particles.

First, I think it's important to look at the term 'force'.

Forces

I often talk about how the mode of thinking characteristic of Roman Christianity became dominant in Europe and as a result, has deeply influenced the way in which scientists have thought and still think about reality.

The main idea that has transferred over is that of a king, ordering the universe around. God created and so ordered the universe and God gave us life and consciousness by breathing it into the lifeless form of Adam. But during the European 'Age of Reason' of the 17th and 18th centuries, God was kicked out of the equation. Unfortunately, it seems they had no alternative equation, they only knew they wanted God out. And so Nietzsche exclaimed,

“God is dead.... And we have killed him.”

With God having “*bled to death under our knives*” the intellectual world was left with a giant deity-shaped hole in every theory of existence. Even though they rebelled against it in the first place, what eventually happened was that they simply substituted ‘God’ with ‘The Universe’.

No, the Universe isn't conscious, because God was conscious! No, the Universe doesn't decide anything because God decided everything!

The definition of the Universe became the personification of anti-God: Inert, cold, unconscious, uncaring machinery.

Yet the minds of men were still not free of the tyranny they were determined to escape. Descriptions of the world were and are still framed as if there was and is such a being, ‘Force’ is one such anachronism.

Force can be defined as,

“coercion or compulsion, especially with the use or threat of violence,”

and this is something that played a key role in the rebellion against God in the first place. The compulsion to act the way He wants you to, or else face the threat and violence of hell for all eternity. The *force* of life.

Interactions

By and large, these ‘forces’ are now more commonly called ‘interactions’. But still, we must tread carefully. Just as there is no ethereal ‘force,’ these interactions are merely labels for observed behaviours of matter. They do not ‘govern’ matter, which would be another top-down and authoritarian view of the universe.

In other words, they do not exist independently of the matter they describe. The interactions or forces were not present *before* matter and then arranged and organised it all according to their *will*,

they are synonymous *with* matter. There is no way to separate the two, in fact. Just as you are what you do, matter is what it does, and what it does is described by how it interacts.

See, we have to be very careful to re-establish what we mean and how we're thinking about what it is we're observing. Because, even if we *don't* use the religious lexicon, it's still very possible that the *way* we think about life is still chiefly that it is being organised by some factor external to it.

If we do that, we're going to arrive at the destination this *way* of thinking demands. What we're thinking isn't nearly as important as *how* we're organising the information. It makes no difference if you're on a train or walking, if you follow the tracks you're going to end up at the same place sooner or later.

The End of The World

So, thinking religiously about life while denying any gods, physics works its mechanical way down the tracks to the very smallest thing it can imagine, the limits of its inquiry, **the end of the world**.

And what does it find?

A void, where God should be...

The Miracle

"Well, something isn't right..." says Schrödinger. Humans can make great predictions, *astonishing* predictions, and yet when we are at the limits of what we can observe in the quantum realm, our equations show us only probability, and no certainty at all.

But that isn't the worst of it! We get no certainty with our implausibly accurate predictive powers and instead, we get *a superposition*. **It's supposed to be both A and B.**

Well, the end of the world is quite a strange place it seems, it's as if, Erwin Schrödinger remarks, a cat could be both alive and dead at the same time. But that's nonsense, surely... We do not observe both at once, we observe one or the other.

And so it seems that we arrive at a miracle in the bedrock of being, whereby the bedrock itself spontaneously takes form and the world unfolds from this miracle.

That Which Is Fundamental

The anti-deist mechanistic view of life, ultimately, doesn't fulfil its promise. It cannot tell you what the fundamental unit of life is. It cannot do this because all along it has been operating under the unspoken belief that what is fundamental is in fact *external* to the object of investigation.

They used to call that externality: **God**.

Now the gap between the unknown externality and the observation is called: **The Measurement Problem**.

What happens there, at the end of the world, when irreconcilable probability miraculously transforms into informed certainty? Mechanics cannot and will never be able to tell us, for mechanics has reached the end of its utility where it cannot see beyond mere likelihood.

Perhaps there is something else, something that is neither at the extreme of an external governor nor at the extreme of a lifeless machine. Perhaps there is a middle way.

Perhaps, it is instead that in the moment of self-awareness, reality evokes a universe, out of itself. Perhaps what was deemed external, was instead, **you**.

Thank you for your time and attention.

Only Love,

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