

## Eternal Recurrence and the TheoCosmos

Marc Deshaies August 21, 2016

Last year the astrophysicist Stephen Hawking spoke from his computer to a remote audience, and asked them to " Try to make sense of what you see and wonder about what makes a universe exist"

A girl in the audience asked how to make sense of the break-up of a Pop Band called One Direction, whose singer Zayn Malik had just split with the band. She asked Stephen Hawking "What do you think is the cosmological effect of Zayn leaving One Direction and consequently breaking the hearts of millions of teenage girls across the world?"

Hawkin responded, and imagine this in his computer-generated voice "My advice to any heartbroken young girl is to pay close attention to the study of theoretical physics. Because one day there may well be proof of multiple universes.

"It would not be beyond the realms of possibility that somewhere outside of our own universe lies another different universe.

"And in that universe, Zayn is still in One Direction."

Before exploring multiple universes let me give a little background.

A year ago, my sermon here was about the life philosophy called Stoicism, which I've been trying to practice for about two years now. In short, Stoicism is an ancient Greek philosophy, in the line of thinkers such as Socrates, Plato, Epicurus, and Zeno. Zeno founded his school of philosophy around 300 BC in Athens at the Agora, or main gathering place on the Painted Porch, or Stoa, so his followers were called Stoics. While today, philosophy tends to be taught in universities in formal

classroom settings, as an academic subject, back then it was taught out in the street, and as a way of life. The scope of philosophy was broader then too, and included Theology and Physics. The Physics of ancient times is my focus today, and how despite being over 2000 years old, I think their ideas about the Universe, God, Time, and Space are still relevant.

As Margaret alluded to when she lit the chalice, ancient Physics taught that everything was made up of Fire, Air, Earth, and Water – the classical Four Elements.

First there was Fire. Most Stoics thought that everything – all stars, planets, land, this building, even us, were at the beginning of time all one huge fire. When the fire cooled down all matter formed into Air, Water, and Earth, and today we have a mixture of the four elements around us. Many Stoics believed that someday the entire universe will all become fire again. In the future, all Air, Water, and Earth will again explode into fire. Stoics thought this pattern has been happening repeatedly in the past, and will continue to repeat forever in the future, over and over again in cycles. The theory continues: since God perfectly orders the unfolding of events, the same exact conversions in exactly the same way have and will repeat, so you and I will have woken up this morning, eaten breakfast, and met here many times, over and over. The idea that everything that's happened will keep repeating is called Eternal Recurrence. In more recent times Woody Allen complained about this in one of his movies: “Great.” He said, “That means I’ll have to sit through the Ice Capades again.”

The ancients would have long philosophical debates about whether eternal recurrence actually happened, and whether time is infinite from past to future, or whether at each phase of Fire, we begin time all over again in a Loop.

I know no way of proving whether Eternal Recurrence is true. What if it is true though? Think about the next decision you make. It might not only affect what happens to you in just this lifetime. After this service you might decide whether to eat a donut or fruit next door during coffee hour. This choice could haunt you over and over again through an infinite number of future lives.

Another decision that might seem trivial is whether to waste time on a mindless television show. If you knew you would have to infinitely repeat the time spent watching a TV show you may not really even enjoy, would you make that choice again? A decision like this might seem trivial, but one winter night when my daughter was six years old, she wanted to play and I said "Not now, I'm watching TV"

Half an hour later my wife and I could not find her. I panicked, searching all through the house. We could not find her anywhere. The back door had been left open with tracks leading off into the snow. I feared she may have even been abducted, so I called 911. Three police cars pulled up in front of our house, and the cops helped us search. While searching, I remember one policeman looked at me suspiciously, and asking pointed question about my daughter's disappearance. Finally, I rejoiced when my daughter wandered back into the back yard on her own, through the snow. She had wandered off into the night on an adventure. To think that I may have to re-live that experience over and over again, partly the result of my choice whether to watch TV or spend time with my daughter, makes me re-think future choices. This leads to my first question:

- 1) Do our actions and decisions have eternal consequences?

The Stoics believed that the entire universe was finite, that the universe was contained inside a giant ball shaped sphere, where material things exist, and outside that sphere is nothing, the Void.

God, to the Stoics, only exists inside the sphere, where matter exists. The fact that God does not occupy the nothingness, the empty void, set the Stoic school of philosophy apart from its rivals. The reason the Stoics thought God only exists inside the bounds of a finite collection of matter is because the Stoics were materialists. They weren't materialistic in the sense of "Let's go shopping", but in the sense that only matter is real. Only things that act or can be acted on exist.

- 2) So my second question is -- and I don't claim to have any of the answers -- Is God metaphysical – separate from and beyond matter?

If only physical objects are real, then God does not exist where there are no physical objects. In fact, the Stoics considered each of us to have an interconnecting spirit or soul called *Pneuma*.

*Pneuma* is the Greek word for breath. All of our warm breaths, *pneumas*, or souls if you will, are interconnected into a cosmic life force called God, such that the entire Universe is like an immensely huge living organism, and is in its purest form during the conflagration when all of us are on fire at the same time.

Today we have the Big Bang Theory to help us understand everything. No, I'm not referring to the TV show, but the scientific Big Bang Theory, which proposes a beginning of time, a singularity, when matter was infinitely dense. One way to compare Stoic Cosmology with the Big Bang Theory is to think of the *pneuma* affecting all matter like the Big Bang Theory's forces of gravity and "Dark Energy" do. Gravity pulls everything together, and Dark Energy pushes

everything apart. Since Dark Energy is stronger, the universe is expanding. In modern times Eternal Recurrence has been combined with the big bang theory periodically such as in the year 2000 and again in 2007, but currently has fallen out of favor. This all leads me to suspect that modern cosmologists are not really sure what is really going on. So until I'm convinced otherwise I plan to stick with the ancient Greek Stoic theory of a finite, cyclical universe.

Even in ancient Greece, though, some people strongly disagreed with this theory. Consider the world view of the Epicureans. Today we think of Epicureans as lovers of pleasure, like fine wine and gourmet food. Back in ancient Greece the followers of Epicurus did think that pleasure was the ultimate good, which contrasted with the Stoic view that the pursuit of Virtue or Excellence was the most important goal. While the Stoics believed a finite universe, the Epicureans held that the universe was not bounded physically, and that there is an infinite number of worlds, perhaps even one where the Zayn Malik is still in the band One Direction. The Stoics believed God is Pantheistic – the sum of all nature, and in a conscious God who loves us, is out for our best interest. By contrast, the Epicureans thought that the Gods are so busy enjoying eternal bliss, that they are indifferent to us humans and our human dramas. So I ask you to consider, if you believe in God, whether you believe that God cares about what happens to you. Even if we are being ignored, consider whether the idea of a God who is indifferent to us would or should change how we behave.

My call to action is to ask yourself what you think about some of these questions:

1. Do your actions and decisions have eternal consequences?
2. Is God separate from matter?
3. Is the universe a loving, conscious organism, or a machine?

These questions are interrelated. I don't have the answers, but I feel like progress can be made by understanding what the questions are.

Think again about all of matter and the surrounding void. Way, way out there in space where nothing exists. Ask yourself: Is God out there?