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- The James Webb Space Telescope has been using infrared astronomy to send back information too old or faint for the Hubble telescope to sense.
- The Webb telescope is so sensitive that, in order to function, it must remain extremely cold (-370 F; that's definitely sweater weather) to prevent the infrared light emitted by it from interfering with the infrared light being collected.
- The telescope is looking back in time at the first stars and galaxies, and has discovered fully formed galaxies far earlier than the big bang theory thought possible.
- The big bang theory prescribes a precise sequence of events in which the coalescing of galaxies occur late in the process, and the Webb telescope is showing us that things did not happen in that order.
- Astrophysicist Adam Frank and theoretical physicist Marcelo Gleiser colorfully describe it as being like "parents and their children appearing in a story when the grandparents are still children themselves."

Before this discovery, there were already questions.

We have been unable to settle, for example, on a speed that the universe is expanding.

Different ways of measuring have yielded different results, consistently.

The Webb data just adds doubt.

¹ https://www.nytimes.com/2023/09/02/opinion/cosmology-crisis-webb-telescope.html?searchResultPosition=2

Each time a theory runs into problems, explain Frank and Gleiser, we develop some sort of explanation, we postulate things like dark matter or dark energy that are said to make up far more of the universe than normal matter.

Maybe a new dark something will explain this, they ponder, or it may be that the way we think of space and time is fundamentally wrong and requires an entirely new model.

Maybe the laws of physics, for example, can change over time, according to physicist

Lee Smolin and philosopher Roberto Unger.²

Physicist John Wheeler, on the other hand, goes even farther.

He thinks that every act of observation might influence not only the future, but also the past of the universe such that each act of observation is a new act of creation.

This could be true.

God is, after all, not limited by time or space.

There is no there or then for God, only here and now.

In *our* limited states, on the other hand, we experience a flow of time and a distribution of space, yet in reality, the effects of our behavior might go far beyond what we experience in the here and now.

I had a spiritual director who took this seriously and prayed for things long past.

² Ibid.

This is exciting stuff, and I wish the scientists well with it.

They are realizing that the universe is not static, but is more *relational* than previously envisioned.

The nineteenth-century model was that things are fundamentally fixed and we observe them without affecting them.

Now we are beginning to think that one or both of these assumptions might be incorrect.

This is hopeful because believing in a fixed and objectively observable universe leads to isolation and passivity.

Everything just *is* and what we do does not really matter.

Now, some are saying that what we do, what we observe matters.

It has an effect on, well, maybe everything.

It reminds me of the Buddhist concept of Indra's net, a way of conceiving of the universe in which countless jewels are suspended in a matrix and reflect in one another.

Change one jewel's orientation, and the reflection changes throughout the universe.

It is a much more relational, that is, meaningful way of seeing the creation.

We Christians call this co-creation.

Think of it.

If we interact with the universe in certain ways, we change everything, maybe even its past.

If we hope, we might come to a different result than if we do not.

If we are joy killers, hope crushers, on the other hand, then we are behaving destructively, not just to the person in front of us, but in ways that ripple out into the universe.

We become destructive rather than constructive.

The battle between good and evil, in other words, starts in our hearts.

We choose.

Every moment of every day, we choose to be hopeful or bitter, joyful or frightened.

I am not suggesting that we can simply imagine something and it will happen, but that we have the power to shift the balance of good and evil in the universe by practicing hope, love, joy.

There is a worldwide phenomenon of which I was completely ignorant until recently.

A manga, a Japanese graphic novel called *One Piece*, created by Oda Eiichiro spawned an *anime* that has been spreading around the world and finally was turned into a Netflix series where un-hip people like me might discover it.

I have watched a few episodes and do not say that everyone needs to rush out and view it, but it does help me illustrate my point.

In One Piece, a fictitious world is divided between pirates and marines.

The marines are mostly corrupt, power hungry, arrogant, and most of the pirates are worse.

Into this divided and dismal world steps the main character, Monkey D. Luffy, whose questionable quest is to find the treasure known as the One Piece and become the king of the pirates.

Luffy's ultimate goal might seem dishonorable and his quest for pirate treasure selfish, yet he always ends up with honorable, loving results, because he does his best to love anyone who is willing to receive his love along the way.

Luffy may or may not succeed at his goal, but he definitely succeeds in making the world a better place.

He consistently acts with insouciant confidence, joy, enthusiasm, and respect of those around him who are willing to return that respect.

In doing so, he touches lives everywhere he goes.

Although his journey has many unanticipated turns, in the course of it, lives are improved.

Evil is weakened.

This is much like us.

So many of our goals may not have been the best.

- They may have been misguided, but what matters is that, along the way, we represent the love of God to others as much as possible, and that will have a positive effect.
- We have the power, simply through our attitudes of hope, joy, and love, to change lives in ways that we do not even recognize.
- Is this not why Paul tells the Romans not that the one whose plan succeeds fulfills the law, but "the one who loves another has fulfilled the law"?
- We may have all sorts of struggles along the way, but if we do our best to represent humbly the love of God to others, then we are doing well indeed.
- If we take up the attitudes of hope, joy, and love, and spread that to others, we may not achieve the specific things we set out to achieve, but God working through us will touch lives.
- If, on the other hand, we choose bitterness and self-pity, legalism and black and white thinking, we resist our role in creation.

We resist God.

We do not fulfill the law.

Like Luffy, if we act with sincerity, humility, and compassion, we will end up going in a constructive direction.

We will touch lives.

Our particular goal may be less important than how we go about it.

Now is the time to wake from sleep, as Paul encourages the Romans, to wake from passively observing a static reality.

It is time to wake up from the illusion that the universe is nothing more than a machine the workings of which we can, in time, understand fully.

It is time to see that, although God is greater than the creation, nothing in creation is outside of God.

Everything is sacred.

Paul is encouraging us to live our lives with greater abandon, to interact with the world without fear.

We are to have confidence that what we do out of love is always good and has good results that we may not be able to see or even imagine.

This idea that everything is relational, interdependent, keeps coming up, even in places like Japan, where fewer than 1% are Christian, because it is in the very nature of the creation.

What we do literally affects the balance of good and evil.

We can spread healing throughout the universe.