

## Vicar's Voice

### *An Advent and Christmas reflection on God in the 21<sup>st</sup> Century.*

#### **A Spiritual Visit in Space**

Advent, the new church year is a good time to reflect about the time ahead and where we have been. We will reflect on God and the universe. I have a rather simple approach: review some facts, look at the questions that these facts bring to the fore, and then analyze some answers that have been offered in response to these questions.

It's that old approach that St Anselm wrote about in the 11th c, "fides quaerens intellectum", faith seeking understanding. It's important to distinguish faith and belief. Faith is an attitude of trust, and belief is trying to make sense of that attitude. What you believe is serious, but not too serious. Karl Barth, who wrote many, many books, including his voluminous *Church Dogmatics*, once commented that the angels would have a good laugh when they saw him pushing a wheelbarrow full of his books through the pearly gate. That we all agree in our belief is not the point. Each of us is seeking understanding. Agreement is not the point. Openness and respect is for sensitive and progressive Christians.

So! The universe. First let's review some scientific facts. We will take an imaginary trip in a spaceship. After we take off, we see the planets including looking back at our blue marble-like planet earth and the sun. Here's where Galileo and Copernicus got in trouble with the church. Prior to that time, everyone assumed that the earth was the center of the universe, with all the heavenly bodies revolving around it, including the sun. Today, we know differently.

Furthermore, all stars, including our sun, have a life span. They don't last forever. In about 4 billion years, our sun will expand into what is called a red giant, and the earth will be inside the sun's new expanse. Gone! Our sun is not the only star with planets. The latest estimate is that in the universe there are 50 sextillion stars with planets in the habitable zone. That's 50 times 10 to the 21st power-huge number!

Continuing on our journey, we head off into our galaxy, the Milky Way. There are approximately 100 billion galaxies, and each one has 100 billion stars. Not only so, but pictures sent back by Hubble show that galaxies are arranged in clusters, and these clusters are connected by long wisps of cosmic gas.

There are objects that we can't see, no matter how powerful the telescope, but we know that they are there because of the gravitational force they exert on their surroundings. Dr. Christa Van Laerhoven, a former member of our parish received her Ph.D. in this area of study- specifically in orbital dynamics. She studies orbits of planets and other smaller things (both in our solar system and outside of it). Her study includes the change of planet orbits over time.

Studies indicate that at the center of each galaxy is a black hole whose gravitational pull is so strong that not even light escapes. But they are there, munching away on stars and cosmic gas and whatever happens to get too close.

There is more to what we cannot see but we know is there. Enter dark matter and dark energy, referred to as dark only because we cannot see them, not because they are Darth Vaderish. And, unbelievably, they make up about 95% of our known universe. 95%! What we know as ordinary matter and energy makes up only a small fraction of our universe.

Leaving the Milky Way, we head into our nearest galactic neighbour, Andromeda. The bad news here is that in 2 billion years, Andromeda and our beloved Milky Way may collide, with a possibility of the destruction of earth. The possible eventual collision with Andromeda is not likely to destroy the Earth.

The good news is, Dr. Van Laerhoven tells me is that when galaxies 'collide' it is rare for stars to actually run in to each other (or planets). Instead the galaxies mix, and the orbits of the stars get shaken up as they react to the new distribution of stuff. Whatever clouds of dust and gas exist in the galaxies might collide and set off a burst of star formation. The comets in the Oort Cloud (the approximately spherical distribution of smallish things orbiting far from the sun, barely bound to the solar system) could get stripped away from the solar system. So we really don't need to worry about the sun becoming a red giant in 4 billion years.

Moving further out, we see that the universe is expanding. There is a phenomenon in physics known as red shift. We all know that so called white light is actually composed of a spectrum of all colors, with red light at one end and violet at the other. Every galaxy (except Andromeda) that we can see exhibits red shift. When a source of light is moving away, the whole spectrum shifts to the red end. Think of the universe a giant raisin muffin rising in the oven. All the raisins are moving away from one another. We all remember from high school that speed times time equals distance. If we run the expansion of the universe backwards to the point from which it all originated, we find that it has taken 13.8 billion years for the universe to get to its current size. That's how old the universe is today.

But there's more, and it complicates matters a bit. Not only are galaxies moving away, but also the galaxies furthest away have a greater red shift, indicating that they are moving away faster. The expansion of the universe is accelerating. Sometime in the future the outer fringe of the universe will be disappearing so fast that we will never know about it.

We don't want to go there, so let's turn our imaginary spaceship around and head home. As we return to earth we note a man-made blanket of gas surrounding the earth that has grown since the Industrial Revolution. We need to worry about human-made blanket that is causing Climate Change. It is happening now. The point of no return is not far away as we suffocate ourselves with our use of hydrocarbons. We are not going to have a magic solution. The dynamics of physics is reality, not mystical desire. Now, given this universe that we inhabit, a basic question presents itself for some of us and that is this: for those of us who choose to speak about god, how in the world can we conceive this god? Where is god? What is god like? Does the ancient paradigm we have inherited have any meaning today?

Clearly the biblical flat three-tiered universe- heaven above, Sheol (Hell) below, and earth in the middle- is not tenable. Perhaps you remember the first Russian cosmonaut reporting from space with dead seriousness: "I find no god up here." The same can be said of Hubble: it finds no god anywhere. Thinking about god may not be an issue for you if you are atheist or if you believe in god but are not interested in the question. To both points of view, I simply ask that you bear with the rest of us on this journey of "fides quarens intellectum", faith-seeking understanding.

The question of how to conceive of god has led to a variety of answers. One is simply to deny the facts of the cosmos. Such fact denial seems to be in vogue these days. However, ignorance is not bliss!

Another answer is not to deny the facts, but to deny god. Recently some people in Canada were upset when our new Governor General questioned people's reliance on religion. She is a woman who doesn't believe in god. "Then what do you believe in?" "Science". For me, science is not a belief but a series of demonstrable quantifiable facts that can be critically reviewed. Belief is an acceptance that something exists or is unquantifiable, especially one without proof. Scientific facts can be proved. Science based theologians and neurobiologists are wrestling with the notion of god and reality.

Earlier this year I read an article from the USA entitled "32 Easters". Statistically, the membership of mainline Protestant churches is declining at such a rate that in 32 years, it will be zero. Other faith groups are quickly moving in similar directions. Clearly, trying to figure out how to conceive of god is becoming a

problem for fewer and fewer people. Let me be clear that I do not think that one needs to believe in god to be happy and I am not trying to entice anyone to entertain such a belief. Being loving, however, is a different story, and we'll get to that.

A third alternative is to think of god as energy, but I could never quite figure out what it meant to say something like "energy loves you".

Another option is to think of god as the consciousness of the universe. There is a phenomenon in quantum mechanics known as particle entanglement. What this means is that if you take one simple particle and blast it in half, those two new particles are so entangled that each would know what was happening to the other even though they are on opposite sides of the universe. Einstein did not like this idea one bit, calling it spooky action at a distance, but you can see where this could lend credence to the idea of god as all-pervading consciousness of the universe.

Another theory is so-called string theory. The idea is that all reality is made up of tiny vibrating strings, but the interesting part for our consideration is that the theory requires there to be 11 (or up to 26) dimensions, and not only the three we know and love, plus time. So you see, god could be in that 11th dimension, right at the end of our nose, and everywhere else.

Then there's the combo: god is conscious energy hiding in the 11th dimension. I must say, that has a certain appeal.

Of course, it's always possible that god created the big bang and then left town, never to be seen again.

If your mind is weary, so is mine. Trying to conceive of god tests the limits of my mind, and I fail the test. But I do have a Rosetta Stone. You remember the Stone? No one could decipher Egyptian hieroglyphs until someone discovered a royal decree that was inscribed with three different languages, one of them being Greek, which was well known. Using the two known languages, the puzzle of the hieroglyphs was solved.

Jesus is my Rosetta Stone. According to the story as told by Mark in about 70 AD, Jesus of Nazareth came saying: change your life, for the kingdom of God is at hand, and the sources say that he spoke as one with authority, not like the scribes and Pharisees. Perhaps 40 years later, a book we call John asked a question: where did this Jesus come from? Sort of an St Anselmian attempt at faith seeking understanding. And his answer reads: In the beginning was the Word, and the Word was with God, and the Word was God... And the Word became flesh and dwelt among us. Those are about the only words I remember from my Greek class at the University of King's College Seminary in Halifax, NS.

And I go a step further. As Jesus is my Rosetta Stone for understanding God who I think of as 'Gus'-Great Universal Spirit who is loving, the resurrection is my Rosetta Stone for understanding Jesus. Let me be very clear. A band of men and women, perhaps 25 in number, lived with Jesus and each other for perhaps three years. When Jesus was executed for challenging the empire, they knew that the cross was not the final word. They were convinced that love and not evil was the driving force of the universe. The resurrection of Jesus was not a physical resuscitation of a dead body. Nor was it simply a subjective experience of the disciples. Nowadays we tend to confuse fact with opinion and metaphor; if enough people "like" something, then it must be true, or at least important. No, the resurrection was an event that was not physical and was not subjective. It transcends understanding but it describes the nature of the universe, and that nature is love. Love rules the universe. This is why I said earlier that it really doesn't matter if one believes in God or not. What matters is whether one is loving, or not.

Science as modern Rosetta Stone has helped us understand the workings of our brains. We can see the brain in action through MRI which the Oxford Dictionary defines thusly: **Magnetic resonance imaging (MRI) is a test that uses a magnetic field and pulses of radio wave energy to take pictures of the head.** In many cases, MRI gives information that can't be seen on an X-ray, ultrasound, or computed tomography (CT) scan. People in meditation and prayer while having an MRI have demonstrated increased activity in the frontal

lobe. This is true for all people, not just Christians. This part of the brain is responsible for attention and focus. Other parts of the brain are also stimulated through meditation. Buddhist visualization prayer stimulates the occipital lobe; Christian Nuns and Priests stimulate the language centers of the brain due to our spoken prayer. These studies have surprisingly demonstrated that meditative prayer reduces the activity in the parietal lobe of the cerebral cortex. This gives those in meditation the sensation of leaving the current reality and connecting to something greater. I have experienced this often in meditation. Neuroscientists have found that people who pray regularly have thicker grey matter, in their prefrontal cortex-which is responsible for willpower and focus as well as in their anterior cingulate cortex-responsible for compassion and empathy. Research has also demonstrated that meditation and prayer reducing the responsiveness of the amygdala- the ancient brain responsible for fear and anger. Meditation lowers blood pressure, fosters emotional healing, and helps the body cope with disease.

The MRI research has demonstrated that those who believe in a “loving God” of their understanding-Christian, Jewish Buddhist, Moslem, etc. experiencing their neural networks changed making it easier to take risks, forgive people, forgive self and have meaning in life which leads to sustainable happiness. Added to this was the fact that those who received and experienced hopeless life situations held on to the truth that God was with them and the overall arc of life will turn out for good. This is true for all no-matter what background after six weeks of meditation. It is in meditative prayer that all humans find god in the waves of the brain. Interestingly, those who held an “angry God” perception did not have these outcomes.

God for me, as noted is the Great Universal Spirit-‘Gus’ who is love. I meet god in my meditation, am connected to this divine spark and move forward. That’s how I see it! I don’t have to have all my questions answered because Gus who loves me and I love is there in my meditation and prayer. What makes sense to you? Perhaps all of us reading this would call ourselves Christian. But across the globe, not everyone would. There are a variety of Rosetta Stones: Buddhist, Hindu, Muslim, atheism, indeed, one for each person. But the basis for each must be love. Not violence, not greed, not turning your back on the disenfranchised. I believe that if there is not love, then you are sorely missing something or you are just plain wrong!

The Russian cosmonaut couldn’t see a god. But we can look at the wisps of cosmic gas shown by Hubble, and see wisps of unquantifiable realities such as hope, joy, emotional peace and love, generated by the Great Universal Spirit. Thank you Gus.

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