

In high school, I was involved in an ecumenical Bible study group that would meet before classes began on Wednesday mornings. Coming from the Catholic school system, this was my first experience with people of other Christian faiths.

Overall, it was a very good experience. We'd have some after-school events as well, reflect on the Word of God, and pray for one another. But it also opened me up to some beliefs that were not necessarily anti-Catholic, but also not quite in tune with exactly what the Church taught.

Specifically, one of these had to do with evolution. We got taught all about Darwin and his theories in the tenth grade as the focus is on biology, and I remember as a freshman hearing a sophomore talk about how she was ready for the class with "the truth." I certainly got the impression that if God created the world, that evolution must take Him out of it. The thing of it was though, when the time came for me to study the topic, there was not too much controversy as the teacher was herself a devout Christian; and even though it was a public school, she gave a presentation on how evolution can be compatible with the theory of Creation in the Christian Bible. The topic was just a day or so and then we moved on.

However, the topic was still of concern to me, as part of me became utterly convinced that proponents of evolution were those who wanted to drive any mention of God out of school, and vilified those who believed in other theories.

And so later in the 90s when I was in college, when there was some news being made around the country because Kansas was considering teaching other theories in the schools alongside evolution, I wrote a letter to the Star Tribune. In it, entitled "Just a Theory," I argue that evolution is just one theory among many, and that evolution should not be the only theory taught in the public school.

Looking back, I wish I may have had a little more insight into just how intertwined science is with my Catholic faith. And I would not have written that letter.

Some might say now wait a minute, wasn't it the Catholic Church that locked up Galileo for holding that the earth wasn't the center of the universe? And the answer to that is yes, the pope at the time unjustly condemned Galileo, and embraced what he and his fellow scientist Copernicus knew, that the earth revolves around the sun. In 1992, John Paul II vindicated Galileo, saying: "Galileo, who practically invented the experimental method, understood why only the sun could function as the center of the world, as it was then known, that is to say, as a planetary system. The error of the theologians of the time, when they maintained the centrality of the Earth, was to think that our understanding of the physical world's structure was, in some way, imposed by the literal sense of Sacred Scripture." While it was 1992 that Galileo was vindicated, indeed it did not take that long for the Church to come around and be more receptive to science. Despite the unfortunate Galileo affair, before this inroads had already been made. Copernicus himself presented his

theory in the Vatican Gardens in 1533 before Pope Clement VII, who approved of it, and he was urged to publish his works by a Catholic bishop and cardinal. He even at times referred to God in his works. In more current times, the same is said of evolution. Though not a required belief, recent popes from Saint John Paul II to Benedict have referred to it as much more than a theory; the key being we don't remove God from the picture, but trust that He is the author of it all.

The thing of it is though is this is not new.

You take for instance Saint Albert the Great. He was a German Dominican friar and became a bishop. Albert did a lot of writings - 38 volumes to be exact. And these were on everything. Some of his topics included logic, theology, botany, geography, astronomy, astrology, mineralogy, alchemy, zoology, physiology, phrenology, justice, law, friendship and love. It was said that his knowledge of physical science was amazingly accurate for his time. Some even considered him a magician. But Albert simply wanted to learn about the world, and inspire others to do so.

In more modern times, you might not know this but the Vatican has an official observatory. Actually two; one in Rome, another in Arizona. It's directed by a Jesuit Brother, Guy Consolmagno. He was born in Detroit, and has a PhD in Planetary Science. He's known as the "Pope's Astronomer." In talking about his

journey of faith and science, he remarked: “I grew up after the war, and in the 50s, this was a time of tremendous optimism, a tremendous faith in science – you know, science won the war ... and science had just cured polio ... and science was going to solve our problems. But at the same time, it was also a very strong moment for the Church. The Catholic schools were booming. I think a lot of soldiers coming back from the war recognized the need for a spiritual side to their lives. And so, when I was in grade school, I learned science from the nuns. And I’m not talking about, you know, “bad” science. I’m talking cutting edge science; really good science. The Sisters that I had in my grade school in suburban Detroit were phenomenally good. They were tremendous teachers; they were tremendous people; they were great examples to me – and they really encouraged me in my science.” From his parents, Italian and Irish, he was instilled an appreciation for learning, an attitude of “I don’t know, let’s find out.” And he points out that in a life of science and religion, that’s the key, because in either science or religion if you think you’ve “got it” ahead of time, then you’re dead. Then it’s frozen, and it withers.”

Later on he went to MIT and wrote a thesis on exploring the evolution of icy moons, and did doctoral work in Arizona studying planetary science, eventually teaching at the University of Nairobi working with the Peace Corps. He says: “And that’s where I learned why we do astronomy, and why it’s important. I would go

up-country every weekend to my other friends that were in the “real” Peace Corps, and I would take my little telescope, and a few slides to give a talk about the latest news from space. And everybody wanted to look through the telescope, and everybody wanted to know about the moon and Jupiter and all those places we had been studying. Of course they did – because this is what makes us human. This is what makes us more than just well-fed cows.” But he also knew this was part of his faith too. He states: “Many years later I reflected on the message of Genesis. The seven days of creation, among other things, shows that God made the universe and made it in an orderly way, and saw that every step was beautiful. But the ultimate point of Genesis is the seventh day, the Sabbath. And what is the Sabbath? It’s the time when we don’t worry about filling our stomachs ... and instead, we fill our souls. And that is why we were created to be astronomers, or artists, or people of prayer, whatever it is we do that fills our souls. And if you deny that to somebody just because they were born in the wrong continent, or the wrong time, or the wrong gender, or whatever excuse you want, is to deny them that humanity.”

Eventually he felt called to become a brother; he had known a Jesuit Brother with a PhD, and went through formation, and upon completion he was given a letter telling him (not asking; it’s that vow of obedience) to go to the Vatican Observatory. It’s been the only appointment he’s ever had. He was an astronomer

for 20 years there, and thinking they'd move him and appoint a director, he was appointed director.

From Brother Guy to Saint Albert the Great to many others, science and religion mix. And on this feast of the Epiphany, it's worth thinking about how the two go together.

Magi is one of those terms we don't really have a great translation for. More than likely these men were stargazers or astronomers from the east; in Chaldeon culture at the time there was an advanced culture of astronomers and stargazers; people who would calculate the movement of planets and stars. But in this, they also discerned the divine. There wasn't this polarization or conflict between science and religion. Rather their scientific work brought them closer to God.

The Magi use science to come to a deeper understanding of God, and in their journey to the Lord, and the Magi giving their best gifts to Jesus, we see how science, when embraced properly, can offer the best it has to offer to the author of all things; this Word or Logos of God who becomes flesh and dwell among us. `

This God created our world, and for us as humans, He wants us to become better and part of that is coming to know the world. Nature religions exalted the world to be adored; but the attitude that sees the world as created is one that allows us to experiment on it, and learn about the origins of life, how rocks are formed, how

nature works, and so many other things. If we have the attitude that the world can be known, and that the world has been brought into being, we have what we call science. Where science and religion come together is when we seek natural knowledge of God, acknowledging that he created the world and when we hunger to know more about it. So many scientists are devoutly religious people, but also when you look at people like Descartes, Paschal, Newton, Copernicus and so many others, and to many contemporary scientists and to our own Church having a science academy and observatories to chart the stars like the magi, we can see how science ultimately stands on religion.

And so on this feast of the Epiphany, I would just invite us to strive to embrace science in your life, and remember that Catholics do not turn our backs on science, but rather we embrace it. I'd suggest that there are three things we can do over the course of our lives that give science it's proper respect.

For one, we need to see how science and religion come together. An example of this is the Big Bang Theory. One of the formulators of this was Fr. Georges Lemaitre, a Belgian priest and astronomer. He also spoke of the expansion of the universe. If we go by the Bible and take it literally, Creation took 7 days. There is also a boundary between heaven and earth of sorts; God comes to earth as the Son and then ascends to the Father; hence we might speak of heaven as being "up

there” beyond the field of vision. But if we take a deeper look, physicists speak of 95% of the universe as being made up of so-called “dark matter” which is matter that cannot be seen or measured in an ordinary way. They hold that the galaxy is held together in part of it, and speak of so-called dark energy and some kind of physical force propelling the universe outward. However just what propels the universe to expand isn’t really explainable. That’s where religion comes in, as for thousands of years, the Christian theological tradition has spoken of a dimensional system of reality beyond ours that is properly invisible but yet impinges on this dimension, influencing it in striking ways. We call this the realm of heaven. When I heard that, my head was certainly spinning as it’s some deep stuff. But I think when we look at the Bible, we have to make sure that it is not taken like a science book - that was the error of the theologians of Galileo’s time that John Paul refers to - meaning when we learn of things that seem to contradict Scripture, we really are just understanding things at a deeper level. For me it was the evolution teaching in which I needed a bit of enlightenment on. But beyond that, science has helped us to understand different things that far from disproving God’s existence, can help us to appreciate God at a deeper level as the origin and author of life. This is especially true this month of January, when we focus in a special way on life issues, another way science and religion can come together. Science has helped us to see so much of what happens inside the womb and proven that life is there; so

perhaps in no better way has science served our faith than with respect to the pro-life movement. Beyond this, when you look at the complexity of the world, the billions of life forms that exist, and the order to the universe, all of these to me are signs of God that, thanks to science, help build my faith and ability to see God in creation.

With that in mind, I think it's also important to have an appreciation for science and to pass that appreciation on to our young people. I'm certainly not suggesting you have to set up some lab in your home like Albert the Great did, but there are many hobbies one can take up or things that we can do to understand the created world at a better level. On television, on cable stations there is the science channel, National Geographic Channel and Discovery Channel that have great documentaries that are worth watching, and if you do not have cable, PBS has two regular science programs, Nova and Nature. There are also countless hobbies related to science that one can get into. My nephew Henry loves science, and in the past couple of years I've given him science kits and a very cool shirt with the periodic table of elements proclaiming "I wear this shirt periodically." When I was a child my parents also got me a telescope for Christmas one year to get a better look at the stars. The point is from TV to hobbies there are many things we can do to learn more about the natural world, and pass this on to our young people that are either free or very inexpensive. It could be just pointing out the Big Dipper to your

child, or pointing to a cloud and explaining the kind of cloud it is or starting a garden and explaining to them how vegetables and flowers grow. Even area nature centers and state parks have many programs for young people and adults alike. Also, when young people study science in school, and think that it has no bearing on their life, I think it's important we encourage them to see how important it is by taking the subject seriously.

I also think we need to have an appreciation for scientists in our life, while taking in different points of view, knowing some things do change, but others won't change. We might not think we have much interaction with scientists, but the truth is we do and I think it's important to listen to what they have to say. Sure, we can investigate things on our own. But scientists are there to help us; whether we are talking about the weather, to vaccines on Covid, to our doctors on a plan for medication, diet and exercise. Sometimes stubbornness can be a problem for us spiritually; but we live in a community, and we are many parts and one body. So hopefully we listen but at the same time, question. Just as we can get tunnel vision on certain things in life, science is not different. I heard a quote from a doctor early on in the pandemic that "group think" was dangerous, and I never thought I'd come to a point in my life where I'd quote Aaron Rodgers as a die hard Vikings fan, but he made the news for saying "If science can't be questioned, it's not science." This is echoing what Brother Guy also said too. I couldn't agree more. I

say this not with respect to just Covid (and I have been vaccinated and received boosters; and I quote Rodgers not over Covid but apply that to all science). Some things we know: the world is round, the planets revolve around the sun, the sun is a star, etc. We also need to stand firm on those parts of our faith that aren't negotiable; for while science shows us unborn life, science has also made possible the destruction of human life through abortion and other horrible means. However with respect to so much in the world of science, there's so much we are still learning. It's important to ask questions - to respect scientists, but to join with them in asking questions to our doctors, or about what the prevailing narrative might be on a scientific topic, be it Covid, climate change, or psychology. God gave us minds; and we want to use them to think, to investigate; not just to take one position and get locked in on it. Rather we need to continually learn more about all science.

The beauty of the story of the Magi is that it shows us science at it's best, which is helping us to appreciate the world God created. Whether you are still in school or it's been years since your last class, know that like the Magi who studied the stars and found God, there is so much beauty in the world that can help us to live lives of better quality and to appreciate the world God gave us. Science has done so much for us to improve our lives and our understanding of this wonderful world we live in, and just because we don't wear a white coat at work or have a bunch of

test tubes in our basement or have to worry about dissecting a frog anymore at school should not mean we should forget about it. Science, and an appreciation for all kinds of knowledge from history to the humanities to everything else in between is so very important. God gave us all the gift of a mind, and when we die we do not need to worry about bringing gold, frankincense and myrrh, but rather want to return to God having used the gifts He gave us to, like the Magi, journey home to Him by having a deeper knowledge of our God and the world He created.