Contemplating Creation: Unfolding the mystery of the Universe in the light of modern cosmology.

Our place in the Cosmos

Pope Francis has written to ‘everyone living on this planet’, expressing concern that we are not taking care of ‘our common home’, which is planet Earth. What is this planet that is ‘like a sister with whom we share our life’? Reflecting on our place in the Cosmos heightens our awareness of just how beautiful our planet is, just how fragile our ecosystems are, just how dependent life is on having the right environment. Our nearest celestial neighbor, the Moon, is dry barren desert; the Apollo astronauts looking back at planet Earth from the Moon had a profound experience of the beauty and vulnerability of Earth, and the loneliness and barrenness of space. The other planets in our Solar System are similarly hostile to life. As we peer deeper and deeper into space, we become more and more aware of the sheer vastness of the Universe, the beauty of the stars and the preciousness of our planet Earth that sustains life and provides us with a place to call home. From space, Earth appears as a single unified planet, without borders or division – it is plain to see that indeed ‘everything is connected’.

Knowing that our planet is but a pale blue dot in some one else’s night sky throws into sharp relief the overwhelming greatness of the Universe and our own smallness in relation to Creation and the Creator. How is it that creatures have lost sight of what a great gift we have in planet Earth? Why do humans neglect to care for their planet that sustains them and provides an oasis of life in the vast emptiness of
space? Why has there been a divergence in understanding of the physical reality of the Universe and its true relation with the Creator? Finding answers to these questions and repairing right relations between creatures and Creator, between creatures and Creation and between a physical and spiritual understanding of Creation are crucial if we are, in the words of Pope Francis, to ‘heal our relationships with God, with others and with the world.

**Repairing the rupture between Science and Religion.**

The pursuit of truth is in itself a noble quest, which finds fulfillment in the pursuit of the Supreme Truth whom we identify as the Creator. But this does not take away from the very worthy human endeavor of pursuing the truth about the natural world in which we live, pursuing the truth about the physical Universe which comes to us as ‘a gift from the outstretched hand of the Father of all’. Over the past century there has been a rapid an ever-accelerating growth in knowledge in many diverse areas of science. This growth in knowledge is in itself a good thing, but knowledge can be used for good or ill, and knowledge can be pursued by right methods and wrong methods. There is also a real danger that some types of knowledge or means of pursuing knowledge are wrongly singled out as being the only important types of knowledge or ways of pursuing knowledge.

In recent years truths of physical science are sometimes wrongly held up with almost religious reverence to the exclusion of all other truths. Pope Francis warns us of this danger, saying that ‘many problems of today’s world stem from the
tendency, at times unconscious, to make the methods and aims of science and technology an epistemological paradigm which shapes the lives and individuals and the workings of society.’ The problem is not the pursuit of science, but rather that science is pursued above all other truth and its methods are used as paradigms to the exclusion of all other methods.

There is a tendency at the dawn of this millennium for people to lament the progress of science as being harmful to our faith and a tendency to paint a gloomy picture of relations between science and religion, to paint a picture of a bitter irreconcilable breakdown. But I would like to offer a more cheerful, optimistic view, I would like to portray science and religion as a couple who have much in common, who have shared hopes dreams and questions, but who through failure to communicate and dialogue have drifted apart. I would like to highlight some of those common questions, hopes and dreams which are shared between science and religion.

**A common quest between science and religion**

Contemplating creation, looking out into the night sky, looking far into its depths, recognizing its vastness of which we can observe only a small part, fills us with awe and leads us beyond ourselves. The National Academy’s Decadal Review, ‘New Worlds, New Horizons’ [NWNH] which is a formative document setting forth the astrophysics research agenda for the United States and much of the Western World recognizes that this contemplation of the Universe affects the human spirit. NWNH states quite candidly that ‘astronomy stirs the public imagination and the human
spirit’, that ‘the Universe has always beckoned us’ and that ‘the opportunities for the future fill us with awe, enrich our culture and frame our view of the human condition’. Secular scientific society recognizes that our study of the Universe stirs the spirit and places our lives in context – it is the beginning of recognition of man’s transcendence, of that recognition that the true meaning of man can only be found by going beyond himself. But because there is little true dialogue between science and faith, perhaps due to lack of common language, that secular stirring of the spirit often fails to reach its fulfillment in the knowledge of the Divine, but remains stunted and incomplete. The scientific community recognizes that knowledge of the Cosmos humbles us, and provides context for the human condition, but lacking the insights of faith it does not recognize that this context finds expression in the right relationship between creature and Creation, between the awesomeness of God and the true humility of man in relation to God.

The question of Origins and final Destiny is another hugely important question that unites both science and religion. Everyone seeks to know where they come from, knowledge of our origins gives us knowledge of our identity. The scientific community expresses a deep desire to ‘trace our origins, from the quantum fluctuations that seeded galaxies in the infant Universe, to the origin of atoms and dark matter, to the first stars and galaxies, and to the formation of planetary systems like ours.’ (NHNW). The desire for and understanding of cosmic origins is common to all cultures, ages and religions and is manifested in the Creation accounts found in many types of literature, both sacred and secular. As the modern
successor to a long tradition of asking about origins and destiny, NWNH asks deep and profound questions ‘is there life beyond Earth? What natural forces control our universal destiny?’ These are deep and profound questions which indeed stir the human spirit. Modern cosmology is relentlessly pursuing answers to these questions and will doubtless find them in due course. But answering these questions from the purely physical approach will leave the human spirit unfulfilled.

**Creation finds meaning in the Incarnation**

Science and religion have many common questions in their pursuit of truth. Science can go a long way to answering many deep questions about the mystery of the Universe and places our Common Home in the context of the vast Universe. But as Pope Francis points out, Creation only finds its true meaning in the light of the Creator, in the light of the Incarnation, which is ultimately expressed in the Eucharist, ‘The Eucharist joins heaven and earth; it embraces and penetrates all creation. The world which came forth from God’s hands returns to him in blessed and undivided adoration’. The pursuit of truth about the natural world in which we live is hugely important, but without the complementary knowledge which comes from faith it will remain forever unfulfilled. The task of those of us Millennials who stand at the dawn of tomorrow on the shores of the Cosmos is surely to build up that dialogue and communication between science and religion so that the two may be reconciled with each other and their Creator.