SINGING AND DANCING WITH THE MUSICALE OF CREATION¹

IMAGE: The dance or the grand musicale of the universe expressing the life of the Trinity. What a performance for humanity!

By John English, SJ

PHOTO OF THE STARS

THE SONG AND DANCE OF THE UNIVERSE

The above photograph recalls what a magnificent sight are the heavens on a clear night! The myriads of planets, stars, and galaxies, as they move across the heavens before us! Psalmists, troubadours, poets, have all expressed amazement at the sight. The photo is an example of the magnificence, size, etc. of the universe. True scientists (as opposed to technicians) and true theologians (as opposed to catechists) in spite of their differences are united in awe and wonder before this sight as they seek to know and understand the heavens. We read in Psalm 8: "When I look at the heavens, the work of your fingers, the moon and the stars that you have established; what are humans that you are mindful of them, mortals that you should care for them. You have made them little less than angels, and crowned them with glory and honour." (Ps 8:3-5)² Psalm139 suggests that God (Trinity) is in a dance with creation: "Even there

¹ Two reasons have led me to write this article. The first is the efforts of Michael Buckley, SJ, to address the causes of atheism in today's culture. He developed the reason in various writings in *Theological Studies*. The *se*cond reason is my discussions with two professional biologists, Lois and Kuruvila Zachariah of Conestoga College and Waterloo University in Waterloo, Canada. They introduced me to the writings of Rupert Sheldrake and other scientists with a post-modern bent. Together we have composed *Twenty-Four Spiritual Exercises for the New Story of Universal Communion*. These will be published by *Progressio*, Rome in 2003.

² Scriptural references are from the *New Revised Standard Version Bible*, Thomas Nelson, Nashville, Tennessee, 1990.

your hand shall lead me, and your right shall hold me fast." (Ps 139:10) Gerald Manley Hopkins, the Jesuit poet of the 19th century also was captivated by the sight of the heavens as he writes in, *That Nature is a Heraclitean Fire and the Comfort of the Resurrection*, "Cloud-puffball, torn tufts, tossed pillows flaunt for, then chevy on an air-built thoroughfare: heaven-roysterers, in gay-gangs they throng; they glitter in marches."³ Scientists have made it possible for us to view the heavens in a new and fascinating way. Time and time again we are presented with images from telescopes and space stations of the circling of planets and gases in the universe. Astronomers tell us that the circling of gases eventually leads to the creation of new stars and planets. They tell us that the universe is constantly expanding. We think of the scripture text: "I make all things new" (Rev 21:5) This activity is like a choral dance. Scientists (mathematicians) are caught up in this marvel as they study motion, sound and light in the movement of the stars, the variations of light and sound coming from beyond our earth.

The great spiritual writer, Thomas Merton challenges us: "To hear His call and follow Him in His mysterious, cosmic dance ...when we see the migrating birds ... when we see children in a moment when they are really children ... For the world and time are the dance of the Lord in emptiness. The silence of the spheres is the music of a wedding feast. ...Yet the fact remains that we are invited to forget ourselves on purpose, cast our awful solemnity to the winds and join in the general dance.⁴

Theologians speak of a dance in the Trinity. We find the following words in a discussion about love in the *New Dictionary of Theology*: "...the love which is God emerged more clearly as the trinity of Father, Son and Spirit engaged in *Perichoresis*, a permanent dance of love into which human beings are invited and empowered to join. The love which is God has been made available to all willing to join the dance, willing to draw others into the dance, willing to make place for others in the dance."⁵ John O'Donnell develops the image of *perichoresis* in a book on the Trinity: "The concept of the Trinitarian God who is love implies the eternal newness according to which the eternal Lord is always his own future. God and love never grow old. Their being remains that of coming."⁶ Both scientists and theologians would insist that the dance is always new. The *perichoresis* in the Trinity is an image of the dynamic activity within the Trinity that overflows into the dance of the heavens, a display that generates wonder and awe.

The above photograph of the heavens invites scientists and theologians to consider our existence in ever new and expanding ways. The images, sounds and movements of our universe attract us to wonder, amazement, dance and song. These interior and exterior delights are the common ground of scientist and theologians.

³ Hopkins in *The Penguin Poets, Gerard Manley Hopkins*: Penguin Books, 1961. Pp. 65-66.

⁴ Merton, Thomas, OCSO, *New Seeds of Contemplation*, Penguin Books (New Directions Paperback), NY. 1972. pp 296-7.

⁵ See the article "Love" in the New Dictionary of Theology, ed. ... Collegville, MN, 1993. P.

⁶ Jungel, Eberhard: *God as the Mystery of the World*, Edinburgh, T. Clark, 1983, pp.24ff, quoted by O'Donnell, John J.:*The Mystery of the Triune God*, Sheed and Ward, London, 2001. p. 170.

The following article can be used in three ways. The first as stated in footnote 1; is to help scientists and theologians with a dialogue that will deal with the problem that results from philosophical differences regarding spirit and matter. A second use is to assist the reader to gain a heightened sense of one's own creaturehood and a third, is to govern one's life with this awareness.

I. THE FIRST USE

Painful rift between scientific and religious approach to the universe.

It is time that we faced the painful rift between science and theology in their understanding of the universe and try to bring about a dialogue between their approaches to human life. This rift is not just an issue of external data, but of interpretation. It enters deeply into the very fabric of our being and into all the aspects of our interpretational relationships. This division affects all of our present culture. The human race has a great desire for integration. We need to discover a way of dialogue that satisfies scientists, theologians and the rest of humanity. Such a dialogue can benefit both science and theology. Eventually a reconciliation might take place that will benefit all humanity, individuals and communities (nations).

Dialogue is more than discussion. It implies that both sides are content that their positions have been satisfied. A third standpoint surfaces. The contributions of both science and theology are acknowledged. Furthermore the contributions are seen as enhancing both disciplines. The importance of each to the human race is recognized. But it is also appreciated that the integrated knowledge and contributions are most important for both scientists and theologians and for the human race.

My thesis is that the topic of creation which includes creator and creature, is the place to begin a dialogue to repair the rift between science and religion, scientists and theologians, to their enrichment and that of the human race. I hope this chapter will be of value in such a dialogue. I will begin with some material on the development of science and theology in recent years. Eventually, I intend to introduce the topic of spiritual creaturehood as an expression of rapprochement. But more on that later. First, some distinctions and definitions.

Distinctions/definitions:

Scientists and theologians are united in the desire to know and understand the great phenomenon of the universe. For the scientist, the universe is a puzzle to be solved. For the theologian, the universe is a mystery to be understood. As I proceed in this article I would like to describe the work of the scientist and the work of the theologian. It is also important for this article that I distinguish both of these from spirituality although both science and theology flow into spirituality.

The province of scientists has become matter alone as it exists in the observable universe. Their object is to investigate and understand matter through sensory data by observation, measurement and experimentation. They observe how material things move and interact. The province of theologians is to investigate and understand God and God's relationship with all that exists. Their material of investigation is the revealed information of sacred writings or the mental activity of sages, prophets, poets, etc. They consider the doctrine given by assemblies of learned people who consider the significance of sacred writings and insights of previous scholars for the present day. A good example of this is the document, "The Church in the Modern World," of Vatican II. Spirituality is somewhat different from both of these although it may contain insights from them. Science and theology are concerned about data external to the scientist or theologian, spirituality is a personal knowledge from the interior experience within the individual or within a community of people.

Writers today speak of a new cosmology in reference to modern scientific discoveries. But it is important to know that three approaches are used in the study of the universe, i.e, cosmology, cosmogony and world view (*Weltanshaft*). John Haughey, SJ, describes them in this way: "A cosmology is a formal understanding of the nature of the cosmos. It can be mythic, religious, scientific, or a mixture of these. A cosmogony is an interpretation of how the world began. It, too, can be scientific, mythic, religious, or a mixture of these. A worldview (*Weltanschauung*) is a cosmic perspective that influences not only one's particular perceptions of the world but also of everything that happens in it."⁷ In this chapter on creation we will be dealing more with cosmogony than cosmology, that is, the origins of the universe rather than its size, make up and activity. For the most part we will use the word cosmology to refer to cosmology, cosmogony and world view.

Scientists' and theologians' past and present position about the universe.

Since the enlightenment scientists began with the supposition that the universe and all that is in it is only physical matter, i.e., inanimate matter of molecules and atoms. They felt no need to consider the place of God in all this. In response to this, and increasingly as certain literalist beliefs had been shown by science to be absurd, theologians started on the "spirit" side of things. God was totally separate from the material world and humans were superior to material things.⁸ They said that the material world, and human bodies for that matter, were not significant. Only the spiritual soul of a human was of significance. Theologians focussed on the transcendence of God in their attempt to understand the wisdom of past generations.

But in the last century both scientists and theologians started to express their knowledge in new ways. Scientists today hover on the edge of the spiritual when they speak of a consciousness in non-human beings whether of animals or plants or stars or galaxies.⁹ They

⁷ Haughey, John, SJ: "World" in *New Dictionary of Catholic Spirituality*, Collegeville Press, Collegville, M. 1996. p.1057.

⁸ The Deist position suggested that God was necessary for the creation of the universe. But after creation God was totally uninvolved with the universe. It was as if God the watchmaker had created and wound up a spring operated watch and then let it wind down until it stopped. This is known as entropy.

⁹ This is a recent topic of discussion by scientists such as Rupert Sheldrake, Terence McKenna, Ralph Abram. See Sheldrake, McKenna, Abraham: *Chaos, Creativity and Cosmic Consciousness*, Park Street Press, Rochester, Vermont. 2001. p. 74.

recognize that the universe has a beginning (big bang theory) and a history. They have moved from a static understanding of the universe with eternal physical laws that follow necessarily to one that is constantly changing with new laws developing within it. Theologians have shifted from a disregard for the body to demonstrate the significance of the bodily, corporate, side of humans. Now they accept the significance of matter. They have moved from an aloofness that promotes human superiority over other creatures to one of relationship and dependency on the rest of creation. They recognize the many ways that humans are materially connected to animals, plants and stars. Today, they say that matter (the body) is the agent of communication and relationship with the rest of the universe. The immanence of God has gained great prominence in their writing.

So we see that there is change and growth in the understanding of the universe and its inhabitants in both science and theology. As the rigidness of positions is softened there arises the possibility of dialogue. Such a dialogue would begin by acknowledging the validity of the other one's position.

This suggests that we can approach the fact of creation as a revealed truth as theologians do or from the data of the senses and expanses of space and time, from the data of existence such as growth and decay, life and death, etc. as scientists do. In a dialogue each can help the other within their own disciplines. Raimon Panikar distinguishes two kinds of dialogue, dialectic dialogue and dialogical dialogue. In dialectic dialogue there is a process of presenting positions for the sake of clarification and defence of one's position. In dialogical dialogue both parties are open to discover something new. The "I-Thou" becomes "We".¹⁰

In a recent assembly the Society of Jesus (Jesuits) had this to say on dialogue between religions:

Dialogue reaches out to the mystery of God active in others...Our spiritual encounter with believers of other religions helps us to discover deeper dimension of our Christian faith and wider horizons of God's salvific presence in the world. Dialogue is a new way of being Church.¹¹

There are many different points on which a common ground for dialogue between scientists and theologians might take place, for example, the topics of animate (living) matter in universe or consciousness in non-human beings. In my various readings on the relationship of science and theology, one topic that is dealt with in both areas is that of the origins (cosmogony) and continuance of the universe. The two approaches have their own understanding, presentations and purposes.

Creation: common ground for dialogue and integration

The topic of creation, that is, the one that deals with creatures, creator and creation is a good topic to bring together the insights of science and theology. It is a common ground for science

¹⁰ Cf. Panifar, Raimon: The Intra-Religious Dialogue, Paulist Press, NY, 1999. p.335-40.

¹¹ Documents of the Thirty-Fourth General Congregation of the Society of Jesus, Institute of Jesuit Sources., St. Louis, MO, 1996, p. 72.

and theology. Both scientists and theologians are creatures first. Yet they approach the topic of creation differently. They both approach creation from a somewhat theoretical or objective position; science from a position of empirical data of the senses, theology from an examination of the historical expressions of sages and sacred writings.

As scientists move from a non-historical (eternal) and law-controlled understanding of the universe to a historical and indeterminate sense of the universe they have developed a new cosmology, the universe is not predictable but constantly changing and expanding. Their experiments and measurements suggest that the universe began with an initial explosion of small particles (quarks, electrons, etc.). They speak of the Big Bang as the moment when the universe came into existence. Some scientists say that a: "Major discovery of the twentieth century is that the universe is neither immutable nor eternal, as most scientists believed in the past."

Concerning the beginnings of the universe Reeves, De Rosnay, Coppens, Simonett, remark: "The universe has a history, it has constantly, endlessly evolved, become rarified, grown cold, become more structured. ... it was nothing more than a kind of thick puree, a formless, pasty soup, with temperatures in the billions of degrees. We have no knowledge of what preceded that event."¹² Stephen Hawking in *A Brief History of Time* separates 'time' from the event of creation. According to John Honner, "Hawking thus concludes that the beginning of time needs no explanation."¹³ Honner quotes these words of Hawking, "There would be no singularities at which the laws of science broke down and no edge of space-time at which one would have to appeal to God or some new law to set the boundary conditions for space-time."¹⁴

Terence McKenna also expresses some doubt about the big bang theory. He says, "One of the things that's always puzzled me about the Big Bang is the notion of singularity. This theory cannot predicate behaviour outside its domain, yet everything that happens and all our other theories follow from it. The immense improbability that modern science rests on but cares not to discuss, is the belief that the universe sprang from nothing in a single moment."¹⁵

This new awareness by scientists gradually pervades our culture. So that as the scientists grapple with the issue of incertitude in the material universe, theologians have to grapple with the notion of incertitude in religious and spiritual life. All we can rely upon is the goodness and love of the Trinity towards us and the universe.

Theologians continue to hold that creation is a mystery, i.e., something that can never be totally grasped, something that has been revealed to us. Like some scientists they have

¹² Reeves, De Rosnay, Coppens, Simonett, *Ibid.* p.16

¹³ Honner, John: "Time, God and Cosmology," *The Way*, London. 1999. p. 33.

¹⁴ Hawking, Stephen, A Brief History of Time, Bantam, NY, 1988. p.136

¹⁵ McKenna, *Ibid*, p. 6

wondered in the past if the universe is eternal. J M. Quinn in an article on "Eternity" summarizes the discussion with these words: "One view, inspired by absolutistic metaphysic, holds that the nature of divine action necessitates an eternal world. ... An effect must be proportional to its cause ... that God generates the universe by natural necessity. ... According to a second opinion, popular with some scholastics, an eternal world is impossible. As God has revealed, the universe was in fact created in time. God so created without necessity and with reason."¹⁶

For theologians the new cosmology of scientists has heightened this sense of mystery as they are faced with the new scientific discoveries as scientists describe their findings about the universe in terms of huge numbers (billions of light years between galaxies) and time (14-15 billion years old). Yet the question remains, "Does the new cosmology actually mean that the universe began fifteen billion years ago? Or that the Big Bang is really the origin of the origin? We have no idea."¹⁷ For theologians we are still within a mystery. The new scientific theories of the origin, size and expansion of the universe have brought the topic of creation into our awareness in a new way.

What is meant by the creative act? Scientists use the big bang theory as an expression of the beginning and development of the universe. A question arises, "Where did the components for the big bang come from—from chance or from previous matter?" Theologians express the act of creating somewhat differently. The creative act that brings and sustains the universe in existence takes place by some force or energy beyond it. For theologians creation implies the existence of a Creator that is beyond the universe. They insist that creation is the act of a transcendent God. They rely on sacred writings to support their contention, such as: "For who has known the mind of the Lord? Or who has been his counsellor? Or who has given a gift to him to him, to receive a gift in return? For from him and through him and to him are all things, To him be the glory forever. Amen." (Rom 11:36). From such writings Christians proclaim that the creator is a person, God the Father, or better a community of persons (the Trinity).

Modern scientists do not get involved in the idea of a creator from outside the universe, especially a personal creator. They wish to deal with the empirical data that is within the universe to explain the origin on the universe. They propose a coincidence or chance situation resulting in the Big Bang. Theologians have difficulty with the scientists starting point.

Believers in God as Creator tell this story: "Some scientists approached God and stated that they could create a better human than God. God says, OK. Let's start. God reaches down and gathers some mud and begins shaping a human. The scientists also gather some mud in order to begin analysing and reorganizing it. Then God says, 'You guys get your own mud!' "Still, the two positions can be the basis of a dialogue on the origin of the universe. Both disciplines begin with the existence of things beyond themselves.

¹⁶ Quinn, J.M.: "Eternity," New Catholic Encyclopedia, McGraw Hill Book Company, NT, 1967. p. 565

¹⁷ *Ibid* pp. 15-16

Both are seeking answers about the origin of the universe. Both can grow in their own disciplines whether they approach creation as a mystery to be appreciated or as a problem to be solved.

Fundamentally, theologians say that God created from nothing (*ex nihilo*). Scientists are not interested in the created act but in how to relate to what is in existence. Theologians see the mystery of creation to flow from experience rather than an objective set of data to be solved by mathematics. Thomas McGonigle writes that, "Mystery centres on the experiential acknowledgment of the absolute transcendence of God whenever one encounters the divine salvific activity within human history. Awe and reverence in the presence of the divine mark all the revelatory experiences that the world's great religions see as crucial to the Creator-creature relationship."¹⁸ Rudolph Otto in his innovative book *The Idea of the Holy* writes on the experience of Moses before the burning bush. Otto speaks of this as an experience of the numinous that brings awe and fascination, it is the experience of abasement, overwhelmed by one's nothingness before the Supreme Above All.¹⁹ A variation of this sense of wonder is also in the heart of the true scientist.

In Christianity the basic revealed texts on creation are found in Genesis and in the Psalms. In seven days the Lord God created the heavens and the earth, plants, animals and humans, "In the image of God he created them; male and female he created them. ... God saw everything that he had made, and indeed, it was very good." (Gn 1:27-31) In Psalm 96 we read: "Come, let us kneel before the Lord our Maker ."(Ps 96:6) St Paul speaks of the knowledge of the Creator given by the things made: "For what can be known about God is plain ... because God has shown it to them. Ever since the creation of the world his eternal power and divine nature, invisible though they are, have been understood and seen through the things he has made."(Rom 1:19-20)

A New Approach to Materials outside the Observer

The new cosmology includes the theories of the origin of the universe, e.g., the Big Bang Theory, the Theory of Evolution, the New Sense of History—age of the universe, of earth, of human race, the new sense of connectedness between the earth and the universe. A Cisternian monk, Bede Griffiths considering the changed understanding the universe writes:

According to David Bohm, the whole is present in every part. Using the analogy of a hologram, what we see is not the reality itself, but the reality reflected through our senses and the instruments which we use to further the senses, interpreted by the observing mind. ... the world cannot be understood apart from the mind. We ourselves are part of the field of energies which we observe; energy and

¹⁸ McGonigle, Thomas, O. P.: "Mystery," *The New Dictionary of Catholic Spirituality*, Editor Michael Downey, Liturgical Press, Collegville, MN., 1993. p.677.

¹⁹ Otto, Rudolph: *The Idea of the Holy*, Oxford University Press, NY 1950. Pp. 10.

consciousness, mind and matter are interdependent.²⁰

A renowned physicist, Neils Bohr, became aware that the very presence of the so-called indifferent observer in an experiment was influencing the measurements in the experiment. He presented this to the scientific world in late 1920s. Since that time the subject to object approach has undergone great changes even among physicists. Lazlo quotes Heisenberg and Bohr on this event: "The atomic physicist has to resign himself to the fact that his science is but a link in the infinite chain of man's argument with nature, and that it cannot simply speak of nature 'in itself.'... 'We are suspended in language,' Bohr concurred, 'physics concerns what we can say about nature.' The works of nature—the objects of classical physics—seemed to have escaped the quantum physicists' grasp."²¹

In an article on creation, Dennis Carroll writes "Teilhard de Chardin's lifelong search was for synthesis: of reason and authority, of matter and spirit, of science and faith. This shows itself in his exigence of continuity: between matter and spirit, between past, present and future, between body and soul, ... despite its pain, failure and apparent absurdities, creation is destined to share the life of the Trinity. For Teilhard the goal of the universe discloses its meaning. ... Teilhard speaks of a "within" to all things, operative even at the atomic level. It is a force for convergence, cohesion and unity."²²

Difficulties with such a dialogue

There are difficulties in dialogue between scientists and theologians. This does not have to do with the basic data presented in both disciplines but rather in the different approaches to knowledge itself. It could be that the real dialogue revolves around the questions: "What is true knowledge?" "How is it attained?" This might be summarized under the topic Objective and Subjective knowledge.

In a dialogue between scientists and theologians, we have to be aware of two basic derivations of knowledge. The scientists consider knowledge as the activity of understanding things in themselves, independent of the one knowing, whether outside or inside oneself. This is commonly named objective knowledge. Theologians would also include the knowledge that is interiorly known by persons (subjective knowledge) that come to us through witnesses. For example, there is no so-called objective evidence on the Resurrection of Jesus but only the witness of the Apostles. The observations of scientists such as Bohr and Heisenberg mentioned above has put into doubt any independent objective knowledge. The past experience of the observer and the very presence of the observer influence both the observed and the interpretation of it. Yet, even

²⁰ Griffiths, Bede: "Universal Consciousness and the Mystical Traditions," in *Theology Digest*, St. Louis, MO. #34:3 (Fall, 1987). pp. 246-7.

²¹Lazlo, Ervin: *The Creative Cosmos; A Unified Science of Life and Mind*, Floris Books, Edinburgh, 1993. p.33

²²Carroll, Denis, "Creation," The New Dictionary of Theology, ibid. p.252.

interior experience is treated in a materialistic, objective way. There is little credence given to data given by the evidence of witnesses in the scientific world. Without actual analysis and experimental measurements the scientific community does not accept such evidence. Whereas, in the Christian theological community witness is of prime importance.

Science is only about measurement, it has nothing to say about the non-material. If there is no physical sign, science must be silent. That is why science says there is no evidence about angels, not there are no angels. Scientism is a position that says only science speaks authoritatively about what is true. At root it is a religious position (like communism). Only the material is real.

Since the 1930's the subject to object approach has undergone great changes even among physicists. John Haught recognizes that Whitehead, Teilhard and Polanyi express the need for subjectivity in all beings in the universe. "It has always been a mark of modern science to leave out of its purview the whole realm of subjectivity... we have every right to ask, with Whitehead, why there is no room in science's understanding of evolution for the emergence of the most obvious experience any of us has, namely, the sense of our selves as experiencing subjects." ²³

Concerning the need for subjective knowledge Haught writes: "Teilhard, like Whitehead, argues there is a subjective element that runs throughout the whole of evolution in varying degrees of thickness. There is always a "within-ness" that corresponds by degrees to the outward complexity of all beings...To followers of both Whitehead and Teilhard there can be no meaningful theology of evolution that seeks to relate the notion of God to a cosmos from which all strains of mind, inwardness, or subjectivity have already been wrenched arbitrarily."²⁴ Teilhard was convinced that there was a purpose, a direction, an end (teleology) to the universe and he promoted the awareness of evolving consciousness in the universe as the basis for his argument.

For Teilhard, Christ was the beginning (Alpha) and the end (Omega) of this grand process. John Haught writes that Teilhard would surely endorse, "Jurgen Moltmann's reminder that in the biblical view of things the word "God" means, before all else 'Future'." Insuch a metaphysics of the future, all things are drawn by an act of attraction to the end.²⁵ This is somewhat like the Aristotlean "final causality", for example, getting a goal in soccer or ice hockey is the final causality. Final causality draws the ball or puck to its destination. Rupert Sheldrake connects this image of attraction given by the mathematician Ralph Abraham to entelechy. Aristotle called this *entelechy* "the end that attracted toward itself the process of change." These attractors in mathematical view "seem to imply a pulling from in front rather than a pushing from behind… [Such] an

²⁵ *Ibid* p.84

²³21. Haught, John: God after Darwin, A Theology of Evolutions, Westview Press, Boulder Colorado. p.168

²⁴ *Ibid*, p178.

idea of an attractor [is significant] for the entire cosmic evolutionary process."²⁶

Both scientists and theologians can deal with objective and subjective data. The objective data of the scientist are immediately present to the senses, whereas the objective data of the theologian are the materials remembered by historical witnesses. These are the written documents and practices passed on from past generations. Subjectively, scientists continue to experiment with the data outside themselves until they are interiorly (subjectively) satisfied that the solution fits all the concerns. Theologians also study documents until they are satisfied with their explanations of the meaning of the documents they have at hand. It is important that the understanding of knowledge combine both objective and subjective knowledge.

To facilitate dialogue it is important to realize that full knowledge demands a subjective knowledge of the objective, that is, experience of the external and an objective knowledge of the subjective grasp of the experience. Lonergan believes that the difficulty of dialogue is found in an incomplete understanding of how we come to know things exterior to ourselves and interior to us. There is a tendency among all of us to consider knowledge as, "Seeing that which is already out there now real." He insisted on a dynamic of Experience, Reflection, Judgment, Decision (and Love). From this he suggests that true objectivity is subjective and true subjectivity is objective.²⁷

Emotion (affect) is the critical difference between data and knowledge. Knowledge distinguishes from data precisely in that it at once creates and confirms belief. Belief, by its very nature, has an affective element. We create knowledge when our perceptions ignite a response in or strike a chord with what we care about through our heart. Truth is about something that matters, Jesus died on the cross is data. To the believer it is a truth that governs one's life.

Theologians can give scientists images, horizons, and perspectives to inspire them in their understanding of and experimental efforts with physical nature. Rupert Sheldrake recalls his Christian background in many instances as he tries to explain natural phenomena.²⁸ It is also true that natural scientists can assist theologians with their images, horizons and perspectives as this applies to spirituality. As to images, horizons, and perspective Lonergan points out:

To learn is not just the sensation of seeing or hearing or touching or the like. To learn is to perceive, and to perceive is to complete that hypothetical entity, the raw datum, with memories, associations, as structure, and one's emotive and expressive reactions. It is the difference between sensation and perception ... not

²⁶Sheldrake, McKenna, Abraham: *Chaos, Creativity and Cosmic Consciousness*, Park Stree Press, Rochester, Vermont. p.31.

²⁷ David Creamer gives a good summary of Lonergan's levels of conscious intentionality. See Creamer, David, SJ: *Guides for the Journey*, University Press of America, Lantham, MD 1996. p.67

²⁸ See books given in endnotes 13, 16....

only can one describe what one really sees, but also one really sees what one can describe. It led a chairman of a department of chemistry to remark to me ... that theoretical developments in chemistry during the previous five years had enlarged enormously the field not of knowledge, but of data. I would not upset the adage, Seeing is believing. But there is also some truth in the inverse statement, "Believing helps you to see it." ²⁹

From this we might say that a scientist with faith might see more data than one without. A theologian with scientific knowledge might gain deeper insights into theology. The spiritual person with a science background might gain a new sense of the presence of the Trinity in the universe.

RAPPROCHEMENT

Transition among scientists and theologians

As mentioned above Scientists today hover on the edge of the spiritual when they speak of a consciousness in non-human beings whether of animals or plants or stars or galaxies. They recognize that the universe has a history. They have moved from a static law structure of physical matter promoted by Newton to awareness of new laws constantly developing. For their part, Theologians now admit the significance of the body side of humans. Matter has become important in the spiritual understanding of things especially in communications. No longer are humans superior over other creatures. There is a communal connection between all things of the universe. Acknowledgment of the immanence of God in the universe is given high priority.

So we see that there is change and growth in the understanding of the universe and its inhabitants in both science and theology. As the rigidness of positions is softened there arises the possibility of dialogue. This demands an acknowledgment of the validity of another's position so that eventually a third position agreed upon by both is accepted. In a recent Congregation of Jesuits they had to say concerning Dialogue with different religions: [135] "Dialogue reaches out to the mystery of God active in others. ... Our spiritual encounter with believers of other religions helps us to discover deeper dimensions of our Christian faith and wider horizons of God's salvific presence in the world. ... to grasp the deeper truth and meaning of the mystery of Christ in relation to the universal history of God's self-revelation."³⁰ So it is possible for scientists and theologians to work to the deeper truth about the mystery of creation—humans and the universe.

²⁹Lonergan, Bernard, S.J.: *A Third Collection, Papers by Bernard, J.F, Lonergan, S. J.*, Edited by Frederick Crowe, S.J., Paulist Press, New York, 1985. p. 16-17.

³⁰ Documents of the Thirty- Fourth General Congregation of the Society of Jesus, Institute of Jesuit Sources, St Louis. 1995. [135] p.72

II. SECOND USE; MATERIALS FOR DIALOGUE

EXPERIENCES OF EXISTENCE, OF BEING CREATURE, OF CREATUREHOOD

A possible process is dialoguing with the common experience of existence, sense-ofbeing-a-creature, and creaturehood. These become the initial items for dialogue between scientists and theologians.

Existence:

Possibly the topic for dialogue for scientists and theologians and all persons, for that matter, can begin with the experience of existence. Then the dialogue might move to the experience of being a creature or that of creaturehood. Different experiences can apply to scientists, theologians and the rest of humanity. The experience of existence and being sustained in existence applies to all three groups. The experience of being a creature applies to theologians and all who believe in a creator. The experience of creaturehood is a spiritual experience. It applies to those who believe in a personal Creator. For creaturehood indicates a sense of personal relationship in that one senses being brought into existence and being sustained in existence through one's relationship with a personal Creator.

Everyone can admit the experiences of existence through the various activities of seeing, hearing, touching, tasting, smelling and bodily experiences of pleasure and pain. The experiences of tiredness and energy are examples of this. The experience of gravity is one of these as happens when falling or lifting objects. The sense of a sudden drop in altitude when flying also brings this home to us. Times of fright and fear of an unknown future are experiences of existence. What are some experiences of existence? Actual scary experience like death dealing accidents,³¹ dreams, nightmares, science-fiction movies, in aeroplanes, looking into a volcano, natural events, etc.

Our existence has always been a conundrum for natural scientists. Some do not want to posit a creator of everything. Yet, they realize that there was a time when the universe as we know it did not exist. So they have a number of theories to explain the existence of the universe. For example, it is eternal and infinite or it is an expression of God (pantheism) or it is pure energy out of which humans and other living creatures on earth have evolved. Up until the late 1890's scientists approached the universe as a great machine. Everything was made of inanimate particles and the animate elements of our universe were the result of electrons interacting in atoms and molecules. They did not concern themselves with the existence of a life force separate as it were from the material particles. This persists today in the description of DNA as an inanimate, chemical composition. The existence of life in plants, animals and humans has presented an even greater puzzle to scientists who do not believe in a living creator of all. Many scientists will admit to a creator of all things at the beginning of the universe. But this creator has no more connection with creatures or

³¹ See my description of an experience of creaturehood in English, John, SJ.: *Spiritual Freedom, From an Experience of the Ignatian Exercises to the Art of Spiritual Guidance* (2nd Edition), Loyola Press, Chicago 1995. pp. 25-26.:

creation. This approach to a creator of it all is known as Deism. James Honner writes about this in a comment on Paul Davies' great designer God: "Davies' God, however, is no different from the impersonal and distant God of the deists. Like William Paley or Isaac Newton or Albert Einstein, Davies sees God as not only uninvolved in the universe, but even as unable to be involved."³²

Sense-of-Being-a-Creature:

That the sense-of-being a creature is different from that of existence can be understood in different ways. One might be given an objective knowledge of being creature. The objective knowledge takes place from a consideration of my own being from "outside myself" as it were, concerning the way in which I have been created and sustained in life. This objective sense of being a creature can also come from my observance of all other creatures. I see their contingency—even the stars die. This objective knowledge is the topic of many sacred texts and the writings of many natural scientists.

The main difference between the sense-of-being a creature and that of existence involves belief in a creator and as such applies to all who believe in a creator. The sense of contingency in being a creature is experienced as an ongoing activity of a creator beyond oneself, whether from the creative energy in the universe of some other unseen power. Such experiences can be the basis for our images of God. For example, they can stir up in us images of God as a benign force for the benefit of humans or as an evil force that is destructive to humans.

Keeping in mind that the sense-of-being a creature implies the existence of a creator means we can understand our experience of being a creature in different ways. We can appreciate our experience from outside-in, that is, into ourselves or from inside-out as within ourselves. Teilhard de Chardin states that all things have a withinness in their being. This is expressed by Whitehead, *et al*, as subjectivity in all things.³³ An awareness of exterior things comes from a consideration of life "outside myself," as it were. I see the fragility and contingency of other beings and I consider my own sense of being created and sustained in life. This sense of being a creature can come from my observation of all other creatures. I see their contingency–even the stars die. This knowledge of things outside ourselves is the topic of many sacred texts and the writings of many natural scientists. We also recognize the experience of life around us. Life is quite different from the physical and chemical existence of molecules, atoms, and minute quanta.

Creaturehood:

We have some immediate, unreflective experiences of existence. These can be the

³² John Honner: "Time, God and Cosmology" in *The Way*, London, 2000. p.33.

³³ Haught, *ibid.*, p. 178.

beginning of a reflective process in which we realize our temporality and the tenuousness of life and seek the meaning of life. Upon reflection we come to recognize ourselves as creatures of a creator. As we question further we might ask, "Is this creator a person?" We might reason: "If we are persons then there is a personal creator." Or we might turn to the wisdom of our ancestors and their inspired sacred writings that proclaim the presence of a personal creator. When we acknowledge that the creator is a person and has a personal relationship to us our experience of being creature becomes one of creaturehood.

The sense of creaturehood is similar to that of being a creature except that the person is able to understand these in terms of one's relationship to God as a personal Creator. This understanding actually changes the experience and can bring to it a sense of the personal presence of the godhead in the experience itself.

In connecting our experience of contingency with belief in God, James Mackey writes, "In the experience of our own contingency we can be drawn, or driven, to affirm a ground of our being. At the root of all faith, forming part of its definition, is the acknowledgment of a power that sustains our existence in all the concrete circumstance of human living. The sense of contingency, in whatever form it strikes home to us, is really a grace—an invitation to see [our] world and [our] present history [as] grounded in a being [we] call God and relate to as such."³⁴

But the sense of creaturehood goes beyond that of the sense-of-being-a-creature. Being a creature from a theological viewpoint is part of an understanding of God's relationship to the universe and its various aspects. However, a Christian theology builds on the revelation of the godhead as a Trinity of persons in relation to the universe and humanity. Spirituality refers to the ways in which we understand our lives in terms of the revelation of the Trinity and the various affective responses of the Trinity relating to us as human creatures individually and communally. Sheldrake makes a telling point about a personal relationship with God and the universe. He writes:

It is hard to feel a sense of gratitude for an inanimate, mechanical world proceeding inexorably in accordance with eternal laws of nature and blind chance. And this is a great spiritual loss, for it is through gratitude that we acknowledge the living powers on which our own lives depend; through gratitude we enter into a conscious relationship to them; through gratitude we can find ourselves in a state of grace.³⁵

Now this personal relationship can be understood from many aspects depending on one's image of God. The image of a personal creator can refer to the image of a demanding parent, teacher, culture, a vindictive judge, a doting parent, and so forth. For Christians

³⁴ Mackey, James P.: quoted under "Creation," in The New Dictionary of Theology, *Ibid*, p. 257.

³⁵Sheldrake, Rupert: *THE REBIRTH OF NATURE, SCIENCE AND GOD*. Park Street Press, Rochester, Vermont, 1994. p 221

the experience and expressions of Jesus are primary. Jesus images God as *ABBA*, *Dear Father*. From his experience at the Baptism he knows himself as the beloved of the Father. He picks up the sense of God given by the Prophets (Moses, Isaiah, Jeremiah, Ezekiel) as a loving benevolent parent (father or mother) full of mercy and kindness "The Lord, the Lord, a God merciful and gracious, slow to anger, and abounding in steadfast love and faithfulness, keeping steadfast love for the thousandth generation, forgiving iniquity and transgression and sin." (Ex. 4:6,7). We are to see ourselves and all other creatures as the "Beloved" of the Father: "When we cry, 'Abba, Father!' it is that very Spirit bearing witness with our spirit that we are children of God."(Rom 8:15-16; Gal 4:6) We are to relate and be responsible to all creatures: "Consider the ravens, they neither sow nor reap, they have neither storehouse nor barns, and yet God feeds them. ... Do not be afraid little flock, for it is your Father's good pleasure to give you the kingdom."(Luke 12:24,32)

The spiritual experience of creaturehood can be considered as the primordial spiritual experience of humans.³⁶ It is more than the experience of existence or of being a creature because one is given a sense of personal relationship with the godhead in the experience of creaturehood. Thus, the experience of limitedness and dependency, fragility and contingency is known in terms of personal relationship founded on one's interior faith perspective. With much reflection on one's interior spiritual experience of creaturehood a person can grow in deep awareness of the giftedness of our lives and respond to the Creator in wonder, gratitude, humility and love.

When I acknowledge that the Creator is a person or trinity of persons I have entered the spiritual sphere and my awareness of being creature becomes the spiritual experience of creaturehood. This awareness is probably the most primordial and common of interior spiritual experiences. It is the common basis for all spiritual experiences. When I reflect on my own experience of creaturehood I may recognize the transcendent component in the experience. Such transcendent experiences carry me beyond my everyday, sensational life to the Creator of all. I am taken out of myself. When this happens I have entered into the realm of mystery, that is, the mystery of my relationship with the person of the godhead, with the persons of Trinity. It is from this personal component of the basic spiritual experience of creaturehood that the many other spiritual experiences with the Trinity, Jesus Christ and the Communion of Saints arise.

When we are attentive to our experiences of contingency, etc, and reflect on our experience of creaturehood, seeking to know its meaning we are growing in understanding of the god-dimension in our lives. When this knowledge moves us to the love of God as Ignatius describes it we have an experience of spiritual consolation. Here is his description of spiritual consolation:

³⁶ For a full study of this the reader might read Jean Mouroux: *The Christian Experience*, London, Sheed and Ward, 1952.

Rule 3. On Spiritual Consolation: I use the word 'consolation' when any interior movement is produced in the soul that leads her to become inflamed with the love of her Creator and Lord, and when, as a consequence, there is no created thing on the face of the earth that we can love in itself. But we love it only in the Creator of all things. Similarly, I use the word 'consolation' when one shed tears that lead to love of one's Lord, whether these arise from grief over one's sins, or over the Passion of Christ Our Lord, or over other things expressly directed towards His service and praise. Lastly, I give the name 'consolation' to every increase of hope, faith, and charity, to all interior happiness that calls and attracts a person towards heavenly things and to the soul's salvation, leaving the soul quiet and at peace in the Creator and Lord.³⁷

Upon reflection one can realize that such an experience of consolation is an experience of interpersonal relation with the godhead. It is primarily an understanding and action of life in terms of the Holy Spirit's presence in experiences of love, call, sorrow, desire and gratitude. This awareness in our experience of creaturehood helps us to appreciate our human connectedness and relatedness with the rest of the universe in terms of subject-to-subject understanding.

There can be confusion in such subject-to-subject understanding. Lonergan was aware of the confusion between the topics of subject, self, perception and consciousness. Joann and Walter Conn discuss this in an article on "Self." They write:

"Lonergan saw the difficulty of psychologists on the self as rooted in a failure to understand the precise nature of conscious subjective as both cognitive and constitutive. ... This meaning of "I" is rooted in an understanding of consciousness as the self's constitutive presence to itself which has proved so elusive. ... the self is aware of, is present to, or experiences, itself operating. Such operatings do not only intend object, then, but also render the operating self conscious. ...they simultaneously make the operating person present to itself make it a *self*. ... In this case, a person is simultaneously present to self in two different ways: as subject (an "I") by consciousness, and an object (a "me") by the intentionality of the reflective act. Consciousness, according to Lonergan's distinctive theory, not only reveals the self-as-subject but also *constitutes* it as such."³⁸

"The process theologians: Hartshorne, Cobb, Ogden and Whitehead—present the idea of a God compassionate and in solidarity with a striving cosmos. "Rather than standing over and against creation, God enters it, is part of it, draws it upward and forward. In such a model, nature is not viewed as something to be dominated, battled or exhausted. The systems within nature can be seen both as subjects and as objects. ... So, too, has the

³⁷See Munitz, Joseph and Endean Philip: Saint Ignatius Loyola, Personal Writings: Penguin Books, London, 1996. Pp. 348-9.

³⁸ Conn, Joann Wolski and Conn, Walter E: sum this up in "Self" *The New Dictionary of Theology of Catholic Spirituality, ibid.* p.872.

Franciscan estimation of nature as a graced interlocutor of humankind. There is a relational concept of creation dear to medieval theology and devotion."³⁹

The three persons of the Trinity are a dynamic community in their inner life and exterior life.⁴⁰ While we might attribute creation to the Father as the Creed says, yet all three persons are involved in the creative act and this includes all of the universe in a creative, new expression of all things. This is expressed in scripture: "In the beginning was the Word, ... All things were made through him."(Jn 1:1-2);

"for in him all things in heaven and on earth were created, things visible and invisible, whether thrones or dominions or rulers or powers—all things have been created through him and for him. He himself is before all things, and in him all things hold together. He is the head of the body, the church; he is the beginning, the firstborn from the dead, so that he might come to have first place in everything. For in him all the fullness of God was pleased to dwell, and through him God was pleased to reconcile to himself all things, whether on earth or in heaven, by making peace through the blood of his cross. And you who were once estranged and hostile in mind, doing evil deeds, he has now reconciled in his fleshly body through death, so as to present you holy and blameless and irreproachable before him." (Col 1:16-22). 16-22).

It is the scientist's new sense of consciousness in other beings in the universe that is connected with the appreciation of subject and subjectivity in the cosmos. These have opened the door to spirituality in the natural sciences. Spirituality has to do with the subjective, interpersonal exchanges in the universe. It has to do with one's interior experiences of relationship with God (The Absolute or Ultimate Reality). The work of John Macmurray in developing a deep understanding of person has largely gone unnoticed. His basic definition of person as a "being in relationship" could help scientists in appreciating their theory of consciousness in the universe and the place of intersubjectivity. The new cosmology with its emphasis on human's connectedness and relatedness with the rest of the universe in terms of subject to subject understanding is a context for a further sense of spirituality.

When we consider creaturehood as a spiritual experience a question arises, "What is spirituality?" Spirituality is dependent on the interior awareness of interpersonal relationships whether about *espirit de corps* or with plants, animals, humans and stars in the cosmos. Today we have an expanded sense of community that includes all creatures. We are lead to appreciate the spiritual truth that "we are saved as a people, as a planet." Interconnectedness and interdependence and intercommunication with the sacred, the interpersonal sense of life is important for all expressions of spirituality. Thomas Berry,

³⁹Carroll, Dennis, "Creation" in *The New Dictionary of Theology*, p. 255.

⁴⁰See O'Donnell, *Mystery of Triune God*, references to Whitehead, Rahner, pp.6-7. Also Hayes, Zachary, OFM: *Creatio ex nihilo*, "designates the movement from non-existence into existence through the creative action of God." *The New Dictionary of Catholic Spirituality*, p. 238.

the advocate of deep concern for the earth points out, "This arc of communion with the earth we can relearn from the Indian. Thus a reverse dependency is established...In some ultimate sense we need their mythic capacity for relating to this continent more than they need our mechanistic exploitation of the continent.⁴¹

For Christians, spirituality is about interpersonal relationship with the persons of the Trinity in whatever way that gets expressed. It is my contention that both science and religion can bring insight that will help in the present affective experiences of the spiritual life of individuals and communities.

St. Paul says that spirituality is about the activity of the Spirit in all things: "But, as it is written, 'What no eye has seen, nor ear heard, nor the human heart conceived, what God has prepared for those who love'-these things God has revealed to us through the Spirit; for the Spirit searches everything, even the depths of God...And we speak of these things in words not taught by human wisdom but taught by the Spirit, interpreting spiritual things to those who are spiritual." (1 Cor 2:10,13) Spirituality is about the activity of the Spirit in our interpersonal life, our prayerful relationship with the Trinity, Our Lady, the Saints, and the interpersonal in the universe. It gives us an interpersonal overarching matrix of understanding, our motivations and choices in life. It develops a reflective knowledge of our human experiences, such as creaturehood, in terms of God's interpersonal relationship with us.

For Christians this is expressed in the first statement of its Creed: "I believe in God, the Father Almighty, The Creator of heaven and earth and of all things visible and invisible." Form this belief one is brought to a realization of one's existence by the personal activity of God, the Trinity. One acknowledges relationship to all other beings as fellow creatures even as kin. And the experience of being a creature goes beyond one's individual sense of existence. There is a further experience of creaturehood that is one's sense of relationship with other creatures and with the Trinity. We are not alone in this experience of being a creature goes beyond one in this experience of being a creature. We are in communion with the rest of the created universe. All other beings are our kin. We are together in the dance of the Trinity. We are part of the community of the Trinity.

The understanding and sense of our creaturehood can be a basis for entering into the mysteries of our faith and the mystery of our own life. So we realize that the historical events of Christ's life and our own present historical state express an experience of creaturehood (See Ph 2:6-11).Our own acts of wonder, awe, sorrow and repentance make the action of Christ present to us through the mysterious way of his Ascension⁴² somewhat as the remembrance at the Eucharist makes the Last Supper present to us.

⁴¹ Berry, Thomas: *The Dream of the Earth*, Sierra Club Books, San Francisco, 1990. p.190

⁴²The following explanation of Rahner on the ascension can give us insight into the presence of Christ's mysteries to us when we contemplate. "The love of the Father seizes the totality of His concrete human experience – including his body. The whole Christ with His whole destiny and everything He experienced and suffered on earth with His human nature has now entered into the glory of the Father. Jesus has not lost a thing. He has not only saved His physical being intact but everything has remained present." Rahner, Karl, SJ: *The Spiritual Exercises*, Herder and Herder, NY, 1956. "The Ascension," p. 245

CREATUREHOOD IN THE SPIRITUAL EXERCISES OF ST. IGNATIUS LOYOLA.⁴³

I now shift to the instructions of Ignatius of Loyola in his *Spiritual Exercises*. He was a master of the spiritual life. He is noted for his own mystical experiences and for the small book of instructions to help others in their relationship with God. He was also one to observe the heavens as a way of appreciating the handy-work of the Creator. We have this account of his reminiscences "And the greatest consolation he used to receive was to look at the sky and the stars, which he did often and for a long time, because with this he used to feel in himself a great impetus towards serving Our Lord."⁴⁴

The sense of creaturehood is first presented by Ignatius in the"First Principle and Foundation" of the *Spiritual Exercises*. In the first sentence of this statement he writes: "The human person is created to praise, reverence and serve God Our Lord, and by so doing to save his or her soul." (SP EX [23])⁴⁵ Ignatius saw life as the continual creative personal presence of the Trinity coming to us through our Creator and Lord. "Creator and Lord" is probably Jesus Christ for Ignatius. In fact he refers to Christ as Our Creator and Lord in many places in the Exercises, for example, [5,15,16,50,52, 229#7,317,351]. As mentioned above, this agrees with St. John's gospel and St. Paul in particular in Jn 1:1-18 and Col 1:15-20.

Here is a modern rendition of Ignatius' First Principle and Foundation:

As a response to the overflowing love of the Trinity we humans in kinship with all other things of the universe are created to praise, reverence and serve the Trinity in all our life endeavours and so discover the fullness of our lives on earth, here and hereafter. In our praise, reverence and service of the Trinity we realize a new awareness of connectedness and relationship with all the rest of nature and the need to develop a free loving attitude even as we use them for our livelihood in all that is left to our free will and is not prohibited. This requires true spiritual freedom on our part. This is the basic attitude toward all of the community of life and is necessary for true love. Such freedom extends to our relationship with everything. So we need to find this freedom in order to develop a right relationship with all creation: human, animal, plants, matter. This gives us the freedom necessary to live with honour or disgrace, in poverty or riches, with a long or short life, in sickness or in health and so of all other matters. Our one desire is to choose what

⁴³ I will be using the translation of Munitz, Joseph, A. *and* Endean, Philip: SAINT IGNATIUS LOYOLA, Personal Writings, Penguin Books, London. 1996.

⁴⁴ Ignatius wrote about this in *REMINISCENCES an Autobiography of Ignatius Loyola*, as heard and written down by LUIS Goncalves Da Camar, in Munitz and Endean, *Idem*, [11]:p. 16.

⁴⁵35. Munitz and Endean, *Idem*, p. 289.

will better help us praise reverence and serve the Three Divine Persons.⁴⁶

In line with our thesis it is important to notice that Ignatius in the "The First Principle and Foundation," links humans to the other creatures in their personal salvation. He writes, "The other things on the face of the earth are to help him" to gain salvation. Today, we would say that all creatures of the universe gain salvation collectively. This is St. Paul's position in Romans: "We know that the whole of creation has been groaning in labour pains until now; and not only the creation, but we ourselves, who have the first fruits of the Spirit groan inwardly while we wait for the adoption, the redemption of our bodies." (Rm 8:22-23) We need to ponder deeply our connectedness with and dependency on all other creatures of the universe. How often do we realize the significance of the sun and other celestial beings for our existence and ongoing life? When we relate to the subject component in all other things we see them as more than objects. We approach them as companions on our spiritual journey to God. This helps us understand anew Ignatius' entreaty to us to become free in our relationships with them. Once again we realize that we are not saved alone but in union with other humans and in fact the rest of the universe. At the end of his *Spiritual Exercises*, Ignatius suggests that we are to consider how the Holy Spirit dwells "in creatures—in the elements, plants, the animals, and in humankind, and in me, giving me being, life, and sensation, and causing me to understand. To see also how He makes a temple of me." (SP EX [235])

The method of prayer for this "First Principle and Foundation" is a consideration. At the beginning of his *Spiritual Exercises* Ignatius lists a series of methods of prayer: "The term 'spiritual exercises' denotes every way of examining one's conscience, of meditating, contemplating, praying vocally and mentally, and other spiritual activities. ... {It} is the name given to every way of preparing and disposing one's soul to rid herself of all disordered attachments, so that once rid of them one might seek and find the divine will in regard to the disposition of one's life for the good of the soul". (*SP EX [1]*) One might suggest that meditation, strictly speaking is an activity of the mind trying to find meaning and understanding in the many experiences of life and contemplation is the activity of bringing into one's being a personal experience of God. Both of these methods are designed to give us a deep sense of ourselves before God.

Consideration is not exactly the same as a meditation or a contemplation in the Ignatian sense. By consideration commentators mean that the one making the Exercises is to read

⁴⁶37. A more literal version of the Principle and Foundation follows:

The human person is created to praise, reverence and serve God our Lord, and by doing so to save his or her soul. The other things on the face of the earth are created for human beings in order to help them pursue the end for which they are created. It follows from this that one must use other created things in so far as they help towards one's end, and free oneself from them in so far as they are obstacles to one's end. To do this we need to make ourselves indifferent to all created things, provided the matter is subject to our free choice and there is no prohibition. Thus as far as we are concerned, we should not want health more than illness, wealth more than poverty, fame more than disgrace, a long life more than a short one, and similarly for all the rest, but we should desire and choose only what helps us more towards the end for which we are created. Munitz, Joseph, A. *and* Endean, Philip: SAINT IGNATIUS LOYOLA, Personal Writings,

Penguin Books, London. P.287

and ponder the text often at the beginning of the Full Exercises. It presents the purpose of human life as creatures before God and the ways to attain this. It puts one into the presence of the Trinity. So it is reasonable to approach it as material for consideration constantly pondering, reading, seeking to appreciate it as a basic truth, applying it to oneself, praying for the generosity to use the statement in all the decisions of one's life. Another way to consider the "First Principle and Foundation" is by reading, pondering and praying with scriptural texts that support Ignatius statement. Some good texts for this are: Ps 8, Ps 139, Eph 1:3-14, Col 1:15-20.

From our perspective such considerations, while good in themselves, do not necessarily give the one praying a sense of creaturehood as we have explained it under the subtitle of **Creaturehood.** For it is possible to consider oneself as creature before God, the Creator, from an objective or "head" position. This helps us to accept the mystery of our existence and even that of the universe. But such understanding is not the same as a "heart" or subjective understanding. A heart awareness requires a certain surrender of self and a perspective of wonder at one's existence. It means that one comes to prayer on this matter as a mystery, the mystery of oneself before the Creator.

The first principle and foundation of our purpose and goal in life is founded on the fact that we are creatures of a benevolent Creator. It's insistence on the need for freedom (indifference) as we relate to other creatures requires that we recognize our interdependence and connectedness with the rest of creation. Ignatius statement about indifference as we relate and use creatures must now be understood as the need for freedom and appreciation in the use of all other creatures as they sustain and companion us in life.⁴⁷ The new appreciation of our connectedness with other creatures in the universe leaves no doubt about the need for spiritual freedom and becomes an assist for someone praying the First Principle and Foundation. The need for such freedom hints at the fact of our creaturehood, our inadequacy in fulfilling the end for which we are created; freedom that involves the correct relationship with all the creatures of the earth and is repulsed by the abuse of our companions on the way to union with God. We seek an awareness of our connectedness with other creatures in order to praise, reverence and serve the Trinity in all things. The "First Principle and Foundation" calls us to a level of desire for our life enterprise and humility in our relationship with our Creator.⁴⁸ Later in the actual "Spiritual Exercises" Ignatius gives a number of ways of discerning the will of God as we make decisions in accordance with the "First Principle and Foundation."

As we proceed to consider the First Principle and Foundation we are brought to our relationship with other creatures of the universe and the full sense of freedom that we need as we use and relate to them. A basic position of St. Ignatius was that God is present

⁴⁷ There is a tradition among indigenous people to carry on a conversation with animals before they kill for food, a conversation seeking forgiveness from and expressing gratitude to the animal.

⁴⁸38. An intimate sense of creaturehood can be attained by using the experiences of creaturehood as the subject of prayer with one's life as part of the "Story of One's Life as an Experience of Graced History." See my *Choosing Life* and Chapter 17 of the 2nd edition of *Spiritual Freedom*

at all times and in all things. (*Cf. SP EX [235]*) With spiritual freedom we are able to relate to other beings in a subjective rather than an objective manner. The relationship becomes affective or loving. We are to be loving companions as we relate and use other creatures for their salvation as well as our own. St. Paul indicates this in Romans 8:19-23. We are brought to a sense of connectedness and dependency on all the other creatures of the universe. If, as Sheldrake and others believe, the stars and galaxies are like angels and have a consciousness, then we can acknowledge our connectedness and dependency on them as we might with animal pets.⁴⁹

Early Christian doctrine saw a closer relationship between creation and salvation than was later envisioned. Created reality never exists without its actual ordering to grace and salvation. The creative act of Christ extends to all humanity and even reaches the cosmic realm as indicated in Colossians 1 and Romans 8. (See also Job (38-39) and Ps 104). Other created things are valued in themselves.⁵⁰ We are creatures of God. We know theoretically that we are and subsist because God wishes us to be.⁵¹ This is doctrine but from a spiritual point of view we have experiences of creaturehood, that is, there are interior movements that point to God, the Trinity, in our life experiences.⁵²

The text itself goes beyond the strictly utilitarian. When considering the "First Principle and Foundation" it is good to recall that we humans are connected with and dependent on other creatures in our life experiences. Our present ecological awareness highlights this interconnectedness. We might say, "we are saved as a people, as a planet," as the quotation from Romans 8 given above suggests (p.21). While there is a tendency to pray with the "First Principle and Foundation" from an individualistic viewpoint it is helpful to realize that Ignatius was referring to "man" in a generic way and that he linked humans with other creatures. We are to approach them as companions on our journey to the Trinity. Today we need to approach the First Principle and Foundation in a more nuanced way. I have attempted to do this in my book *Spiritual Freedom: Second Edition* (Loyola Press, Chicago, 1995).⁵³

We ought not to misconstrue the *Spiritual Exercises* and follow the heavy postenlightenment (modernist) approach to spirituality as a vertical and individualistic relationship with God. This was totally out of Ignatius' ken. His whole life was communal. He realized that salvation was a communal affair and spirituality was a

⁴⁹ See Sheldrake, "Maybe Angels" Idem

⁵⁰ See "Creation" in ND Cath Sp. Pp 239-40

⁵¹ See Conn Wolski, Joan, in LaCugna: *Freeing Theology*, Harper, San Francisco, 1993.p.237 and "Self" in New Dicitionary of Catholic Spirituality, Collegeville, MN. pp865-6

⁵² See O'Donnell, *Mystery of Triune God*, references to Whitehead, Rahner, pp.6-7. Also Hayes, Zachary, OFM: *Creatio ex nihilo*, "designates the movement from nonexistence into existence through the creative action of God." *The New Dictionary of Catholic Spirituality*, p.238.

⁵³ See my *Spiritual Freedom*, pp 23-42.

communal affair even though he would not express it this way. John Wickham writes about this in, "The Communal Dimension in the Spiritual Exercises Today."⁵⁴ Ignatius could see the Spirit of God in all creatures. He had a high regard for St. Francis of Assisi who had such a love for other creatures of the earth and wanted to emulate him.

There are the stories of our elders, our grandparents and elders of our traditions that can become part of this prayer. The old stories from the elders in various cultures can still speak to us about creation and creaturehood. The theological myth of creation in Genesis gives us many insights about the universe and creation. And the new cosmology can give us a further appreciation of spirituality.⁵⁵

When praying with our sense of creaturehood we can begin with our own experiences or with the various stories about our beginnings, for example, how order came out of chaos. Or to appreciate the order that is in the chaos.⁵⁶ There are also the explanations of the natural scientists. I suppose a Christian cosmologist might contemplate the Big Bang as an act of and presence of the Triune God as well as imagine it for scientific purposes and in this discover the mystery of creation anew.

There are many ways to heighten our awareness of creaturehood. The following is a fairly extensive set of considerations, meditations and contemplations that can help us experience and appreciate our creaturehood.

THIRD USE

A PRAYER EXERCISE ON CREATUREHOOD

At this juncture I will give a way entering into our sense of creaturehood. At the start it is important to recall that my whole life story is an experience of grace. It expresses the continuous activity of the Trinity through humans and other creatures who sustain me and constantly give me new life. These others are an expression of the Creator s loving presence to me and the whole universe.

A first step in this exercise is to recall experiences of creaturehood. These can be from within oneself or from beyond oneself. Experiences within oneself are those of fragility, contingency, uncertainty, etc. Experiences from outside oneself are those of fright or panic as happens in an accident or when facing a wild animal. A second step is to reflect on the experience so as to appreciate what has happened. This can lead to a description of being a creature and eventually the whole meaning of being a creature and the spiritual sense of creaturehood.

⁵⁴ Wickham, John, SJ: "The Communal Dimension in the Spiritual Exercises Today." *Review for Religious*. St Louis, 1991, pp. 75-84.

⁵⁵See Sheldrake, Rupert, in *Chaos, Consciousness and Creative Cosmos* by Sheldrake, McKenna, Abrahams, Park Street Press, Rochester, Vermont, 2001. p.54-55.

⁵⁶ See McKenna, Terence, *Ibid* p.7.

It is helpful to recall the philosophical transcendentals that apply to all things: all things are *one*; all things are *beautiful*; all things are *true*; and all things are *good*. These transcendentals apply to ourselves as humans and they are enhanced by are relationship with all other things of the universe. The following exercise is to point out the experiences of transcendence coming to us in our relationship with other things of the universe and to heighten awareness of our sense of creaturehood through reflection of our interconnectivity ⁵⁷ with all other things of the universe.

Scriptural context:

I read the following scripture text as a way of entering into the mystery of creaturehood:

For the creation waits with eager longing for the revealing of the children of God ... in hope that the creation itself will be set free from its bondage to decay and will obtain the freedom of the glory of the children of God. We know that the whole creation has been groaning in labour pains until now; and not only the creation, but we ourselves, who have the first fruits of the Spirit, groan inwardly while we wait for the adoption, the redemption of our bodies.(Rom 8:19-25).

The desire of my heart:

I ask for the grace to discover and appreciate my sense of creaturehood as an intimate act of the Trinity's loving presence with me throughout my life within the community of life of the universe.

Ways of disposing oneself to receive the grace I seek:

I proceed in the following way. First to recall experiences of being a creature, then reflecting on these experiences to appreciate the deeper meaning of creaturehood, then to locate them in the overall context of life.

Point 1: I recall my life looking for various experiences of being a creature. First, have I had a sense of being a creature from within? What was the occasion? What happened to me? When did I have an experience from outside myself? What was the occasion? What happened to me? What new awareness has been given to me about myself, about my relationship to other creatures and to God? Second, I reflect on my sense of existence and consider how I am sustained in life.

Point 2: My sense of Being One.

I reflect on the interconnectedness of all things in the universe and my sense of identity with all the other things of the universe for my existence:

- how my physical body is made up of the chemical components of the earth.

⁵⁷ Evelyn Fax Keller: "The new buzzword for understanding living systems is interconnectivity, as scientists switch their focus from reducing everything to its smallest parts." (Winnipeg, Free Press, Friday, March 28, 2003.)

- how water and air are essential for my life.

- how the plants, fish, birds and animals give me my sustenance.

I consider that these experiences of identity are expressions of the Trinity and that my own interior sense of oneness is an expression of The Oneness of all things in the godhead.

Point 3: My sense of The Beautiful.

I reflect on the various things of beauty in the world as an expression of The Beautiful:

- the beauty of form in other humans, plants, fish, birds and animals, etc.

- the beauty of colour in the sky, mountains, lakes, flowers, etc.

- the sense of real connection through colour, odour and graceful movement, etc.

- the grandeur of the mountains, valleys and streams as if they were created only for my enjoyment and to fill me with awe.

I consider how all these beauties nurture and uplift of my soul.

Point 4: My sense of The True.

I look over my life story searching out those experiences that indicate, "I am a beloved of the Trinity." In particular I consider my experiences with other creatures that highlight this truth of my being.

- I recall times when the truth that "I am a beloved of the Trinity" filled me with joy and surprise.

- I recall trees and plants that have called me to a sense of awe before the Trinity.

- I recall various house pets which have protected me and shown great affection to me.

- the ways in which our instincts work.

- I reflect on the ways in which we adjust and meet new situations in life. I consider how the other creatures of the earth reflect the love of the Trinity for me and draw me to The True.

Point 5: My sense of The Good.

I recall that the Genesis statement that after the creation of humans God was pleased and saw that humans were very good indeed.

I look over my life experiences to become aware of the many ways in which other creatures of the universe have brought me into existence and sustain me in life. I

reflect on the truth that all things are good and calling me to The Good.

I consider how the other creatures of the earth show forth their goodness to me.

Point 6: I reflect on my interconnectivity with all that is and how they are the instrument of my communication with all things.

I reflect on the sounds that are present on the earth calling to me:

- I put my ear to the earth and hear its heartbeats

- sounds of wind on the earth

- sounds of the ocean

- silence of plants growing
- sounds of human voices, of singing by humans, birds and animals, etc

I consider that these sounds are a means of communication between myself and the Trinity.

I enter into the various ways that I communicate with others, the planets, humans, animals and plants.

Point 7:

I reflect on the ways various creatures show affection towards me and call me to express myself in a compassionate and heart-felt way:

- the experiences of affection in my life from humans, fish, animals, plants, sun, etc.

- I consider the ways that other creatures enhance my being by their modes of communication.

- I recall how they have worked and protected me.

I consider how the other creatures of the earth sacrifice themselves for my existence giving me sustenance, protecting me in times of danger, etc.

Point 8:

I consider how creatures with their extraordinary gifts call me beyond myself and my present imagination and give me a new sense of my potential.

-I see how other creatures achieve things that I would like to do, for example, fly, swim, sing, warn others of danger, etc.

I consider how all these capabilities open up new possibilities in my imagination and call me beyond myself and give me hope.

Point 9:

I look over my life story with the other creatures of the universe, searching out those experiences of light that have consoled me and lifted me up. I look over my life story in terms of the other creatures of the universe, searching out those experiences of chaos, suffering, disorder, dysfunction and shadow that give me an appreciate of the marvellous compliance of other creatures before the mysterious actions of the Trinity and the ways in which newness and hope arises in the universe and in me.

-I consider how the other creatures of the universe have been a source of enlightenment and truth to me.

- I reflect on my own need for this kind of attitude and I think of Christ's compliance to the weather, land and other creatures. I consider how all these shadow experiences have been a grace to me.

- I realize that my whole life is an experience of being loved (graced) by the Trinity whether in light, shadow, suffering or hope-filled experience with the community of life in the universe.

Dialogues:

I let my sense of dependency and connectedness with the rest of creation emerge into conversation with the Creator of all. I express whatever surfaces, for example, amazement, insights, awe, appreciation, gratitude, humility, etc. I pray to offer myself to the Creator in ways that will enhance their beautiful expression of love to me in this evolving universe.

I close with the prayer Jesus taught us.