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MERCY AND SELF GIFT

*Exploring the Implicit Connections between
Charles De Koninck's Evolutionary Biology and Theological Principles*

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INTRODUCTION

We can consider the evolution of the cosmos as a maturation of traces which will terminate in an image of the Trinity. In evolution, the Trinity draws the world to itself in order to imprint on it its image.¹

Consequently, when Christ came into the world, he said, “Sacrifices and offerings you have not desired, but a body have you prepared for me... ‘Behold I come to do your will, O God,’ as it is written of me in the roll of the book” (Heb 10:5,7).²

Given the immensity of the mercy that the Almighty has chosen to manifest, it is only fitting that the universal royalty of Christ and of His mother was manifested in the Passion. “Pilate then said to him, You are a king? Jesus replied: Thou hast said it, I am a king.” It is the same Christ who said, “I am a worm and no man, the opprobrium of men and the castoff of the people,” and “I am king, king of kings and lord of lords.” It is in the Passion that shines forth in all its profundity and extent the meaning of “I am black, but beautiful.”³

Evidence from astrophysics, paleontology, comparative biology, and biochemistry seems to show that our cosmos has undergone a process of evolution from primal matter to humanity. By evolution, I mean a process by which less perfect beings produce successively more perfect beings. This process is understood in different ways. Positivists, who dominate the scientific culture of the West, deny any direction and purpose to evolution because they deny the existence of anything that cannot be grasped in mechanical, mathematical terms, e.g., the good and all

¹ Charles De Koninck, *The Cosmos* in *The Writings of Charles De Koninck*, vol. 1, trans. and ed. Ralph McInerny (Notre Dame, Indiana: University of Notre Dame Press, 2008), 330. (Henceforth, English translation referred to as *The Cosmos*.) “Nous pouvons considérer l’évolution du cosmos comme une maturation de vestiges qui se terminera à une image de la Trinité. Dans l’évolution, la Trinité tire à soi le monde afin de lui imprimer son image.” *Le Cosmos* in *Œuvres de Charles de Koninck*, vol. 1, *Philosophie de de la nature et des sciences*, ed. Yves Larochelle (Québec: Les Presses de L’Université Laval, 2009), 126. (Henceforth, French original referred to as *Le Cosmos*.)

² Scripture references are from Revised Standard Version Second Catholic Edition (San Francisco: Ignatius Press, 2006).

³ Charles De Koninck, *Ego Sapientia: The Wisdom that is Mary* in *The Writings of Charles De Koninck*, vol. 2, trans. and ed. Ralph McInerny (Notre Dame, Indiana: University of Notre Dame Press, 2009), 39. (Henceforth, English translation referred to as *Ego Sapientia*.) “Vu l’immensité de la miséricorde que le Tout-Puissant avait choisi de manifester, il était de toute convenance que la royauté universelle du Christ et de sa mère fût manifestée dans la passion. Pilate lui dit alors: Tu es donc roi? Jésus répondit: Tu le dis, je suis roi. C’est le même Christ qui dit: Je suis un ver, et non un homme, l’opprobre des homes et le rebut du peuple, et: Je suis roi, Roi des rois et Seigneur des seigneurs. C’est dans la passion qu’éclate dans toute sa profondeur et toute son étendue le *nigra sum, sed formosa*.” *Ego Sapientia: La sagesse qui est Marie*, (Québec: Éditions de L’Université Laval, 1943), 122. (Henceforth, original French version referred to as *La Sagesse*.)

spiritual realities.⁴ Matter, force, and motion are all that exist for them. The only valid knowledge is expressed in mathematical statements about the laws governing physical reality. As a result, they deny any essential difference between living and nonliving or humans and other animals. If there is nothing but matter, life is only an epiphenomenon of organization and consciousness is only an epiphenomenon of the brain. Humans are transitional organisms that arose by chance in a process that has aimlessly produced countless other transitional organisms. Since humans arose for no reason and are either in transition towards some new form or will become extinct, there are no grounds for saying that they have a nature ordered to a good, a goal that can be reached or missed. Moral laws are purely social fabrications.⁵

However, positivists are not the only ones who have become too defensive to accept the surprising evidence of reality. There are also Christians who are convinced that evolution cannot fit with an account of creation and providence. No scientific evidence could be sufficient before the tribunal of their opinion. Some Christians read Genesis with a false literalism that comes from the historical critical method of the nineteenth century, rooted in scientific positivism. Every text, even the text Christians consider inspired, can only mean what the writers in their cultural milieu intend. The entire wealth of symbolic depth, the spiritual meaning, disappears before such a reductive reading of the text. This is far from the reading of the Catholic tradition.⁶

Other Christians accept universal common descent but argue from the complexity of life to a God of the Gaps. For example, Intelligent Design advocate Stephen Meyer writes:

⁴ See Jacques Monod, *Chance and Necessity: An Essay on the Natural Philosophy of Modern Biology* (New York: Vintage Books, 1971); Edward O. Wilson, *Sociobiology: The New Synthesis* (Cambridge Massachusetts: the Belknap Press of Harvard University Press, 1975); Daniel C. Dennett, *Darwin's Dangerous Idea: Evolution and the Meanings of Life* (New York: Simon and Schuster, 1995); Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 1999); Eric J. Chaisson, *Cosmic Evolution: The Rise of Complexity in Nature* (Cambridge University Press: Cambridge, Massachusetts, 2001); Stephen Hawking and Leonard Mlodinow, *The Grand Design* (New York: Bantam Books 2010);

⁵ Todd A. Salzman and Michael G. Lawler, *The Sexual Person: Toward a Renewed Catholic Anthropology*, (Washington D.C.: Georgetown University Press, 2008). 48-49.

⁶ See Hugh Owen, "The Traditional Catholic Doctrine of Creation," February 16, 2012 The Kolbe Center for the Study of Creation, <http://tinyurl.com/9ljq2o8> (accessed October 29, 2012); Henry Morris, "The Literal Week of Creation," Institute for Creation Research, <http://www.icr.org/article/naive-literalism> (accessed October 29, 2012).

How much morphological change can undirected mechanisms such as selection and mutation produce, and at what point if any, would intelligent design need to play a role? Such questions move from whether intelligence played a role in the history of life to *how*, *when*, and *how often* intelligence acted.⁷

Meyer divides intelligence against natural law and chance. If nature and chance cause some morphological changes, then divine intelligence is not involved. The relation between the first cause and secondary causes is competitive.

Intelligent Design thinkers argue correctly from design in nature to a Designer. They rightly reject random mutations and natural selection as the *only* mechanism for producing development. However, they fail to distinguish between artifacts and natural things. They do not recognize that natural things have intrinsic inclinations toward their fulfillment. Living things develop themselves and move themselves towards what is good for them. What is worse, Intelligent Design proponents see the causality of creatures as competitive with God.⁸ God doesn't cause what happens naturally. For example, Michael Behe argues that "irreducibly complex" molecular organs like a bacterium's flagellum could not have evolved by small random mutations and natural selection, because they would present no advantage to an organism until they were complete. Therefore, they could not have been selected for fitness. They could not have developed naturally, but must have been designed by God.⁹

Such apologetic arguments for the God of the Gaps in evolution will never satisfy those who thirst for meaning. It is unsatisfactory since the science of tomorrow may close any particular gap or a function may be discovered for any partial mechanism. The watchmaker God who designs a

⁷ Stephen C. Meyer, *Signature in the Cell: DNA and the Evidence for Intelligent Design* (New York: HarperCollins, 2009) 479. See also William A. Dembski, "The Logical Underpinnings of Intelligent Design" in *Debating Design: From Darwin to DNA*, William A. Dembski and Michael Ruse, eds. (Cambridge: Cambridge University Press, 2004).

⁸ See the analysis of this often tacit assumption, which derives from Nominalism and was widely accepted by the Reformers and Baconian natural science, in Charles Morerod, *Œcuménisme et philosophie: Questions philosophiques pour renouveler le dialogue* (Paris: Parole et silence, 2004); *Ecumenism & Philosophy: Philosophical Questions for a Renewal of Dialogue* (Ann Arbor, MI: Sapientia Press of Ave Maria University, 2006).

⁹ Michael J. Behe, *Darwin's Black Box, The Biochemical Challenge to Evolution* (New York: The Free Press, 1996) 51-72. For Behe's continuing argument trying "to decide with some precision beyond what point Darwinian explanations are unlikely to be adequate," see Michael J. Behe, *The Edge of Evolution: The Search for the Limits of Darwinism* (New York: Free Press, 2007) 8.

complex universe and sets it going or the God who intervenes from time to time to cause an evolutionary saltation is not the God in whom we live and move and have our being. He has a very partial relevance for cosmic events.

The Catholic Church does not teach evolution or condemn it; she only teaches that knowledge which is necessary for salvation. She does not judge scientific theories except insofar as they contradict what we know from revelation. The encyclical *Humani Generis* (1950) of Pius XII already entertained evolution as a serious hypothesis worthy of investigation as long as it was not held to contradict truths of the faith like original sin. John Paul II, in an address to the Pontifical Academy of the Sciences in 1996, said, “New knowledge has led us to realize that the theory of evolution is no longer a mere hypothesis.”¹⁰ Pope Benedict has spoken and written on many occasions about evolution both before and after becoming Pope. He held a conference in Castel Gandolfo in 2006 entitled “Creation and Evolution,” at which most contributors held that evolution is a fact. It is only when the theory of evolution becomes secondarily joined to materialism that the Church condemns it.

Catholic philosopher and theologian Charles De Koninck offers a fascinating solution to the problems posed by evolution. He was remarkable for the energy with which he grasped the image of the evolving world with its profound theological meaning. De Koninck was a faithful disciple of St. Thomas as well as a lively and courageous one. He did not merely explain his master, but pressed onward to study the questions that modern science and the current political situation posed about the world. De Koninck says of himself:

I will present these opinions with all the rowdy and headstrong emphasis necessary as a condition of their probability... We can say here that with Aristotle and St. Thomas, we believe that the philosophical life is above all a life: that it advances by groping, often very ambiguous, and that in many cases, the domain of opinion is for us the most interesting.¹¹

¹⁰ John Paul II, “Message of Pope John Paul II to the Pontifical Council of Sciences concerning the relationship between Revelation and theories of evolution” 1996.

¹¹ Charles De Koninck, *Course Notes on Nietzsche*, 1936. trans. David Quackenbush. Handwritten French original, *Course sur Nietzsche*, also on website. The Charles De Koninck Project. <http://www.charlesdekoninck.com/course-notes-on-nietzsche> (accessed on October 29, 2012). “Et pourtant

De Koninck was born in Belgium in 1906 and died at the age of fifty-eight in Rome in 1965. He taught philosophy at Laval University in Quebec (1939-1965) and the University of Notre Dame (fall semesters 1957-1963), where he also directed the graduate program in philosophy. He was involved in many controversies, most famous among them one on the common good. He had a passionate interest in everything modern experimental science discovered and strove to understand the meaning of the universe and its history. He wrote many papers exploring the relationship between modern science and traditional philosophy of nature. When only thirty, he wrote his first book about the expanding universe and evolution. His greatest love, however, was Mariology and he published more on the Blessed Virgin than on any other topic.¹²

De Koninck finds immense theological significance in evolution. God manifests more mercy and gift-of-self in an evolving cosmos; this manifestation calls forth a more intense desire to return that gift with love and praise. In *The Cosmos*, De Koninck gives a scientific, philosophical, and theological interpretation of evolution. He never finished the theological part which is brief and in some cases only hints at truths. Sometimes he makes a statement and then cites or paraphrases St. Thomas as a proof for what he asserts without making any other argument or drawing out its consequences. Reading his later book on Mary *Ego Sapientia* moved me to rethink De Koninck's cosmology in light of the doctrine he presents on mercy and the circular order of the Trinity in his book on Mary.

In this dissertation, I will present De Koninck's doctrine about evolution from *The Cosmos* and some of its theological implications. I will try to complete De Koninck's theological section in *The Cosmos* by taking what De Koninck wrote about the Incarnation in later works and

je les présenterais avec toute l'emphase tapageuse et volontariste nécessaire comme conditions de leur vraisemblance.

Disons ici qu'avec Aristote et S Thomas, nous croyons que la vie philosophique est avant tout une vie: qu'elle avance par tâtonnements souvent très ambigus, et que dans beaucoup de cas, le domaine de l'opinion est pour nous le plus intéressant" (*Course sur Nietzsche*, Lecture 1, pp. 2-3).

¹² Ralph M. McNerny, "Charles De Koninck: A Philosopher of Order" *New Scholasticism*, volume 39, issue 4, October 1965, 491-516; Thomas De Koninck, "Charles De Koninck: A Biographical Sketch" in *The Writings of Charles De Koninck* volume 1 (Notre Dame, Indiana: University of Notre Dame Press, 2008) 69-97.

applying it to his doctrine on evolution. My thesis is that there is more divine mercy shown and a more profound Trinitarian imprint inscribed in the cosmos through creation completed by evolution than would have been possible by instantaneous creation of all species. Evolution is the cosmological generation of Christ from the first instant of the Big Bang to His birth in Bethlehem through the impulse of the Holy Spirit. The circular order of the Trinity is reflected in the procession of creatures from the Father and their return through the slow ascension to man by gift-of-self in evolution, and through man back to the Father. Creatures proceed through the exemplar causality of the Son and Spirit and ascend by the same. The Father calls forth their natures by the Word and draws them back by the Holy Spirit, who impels mutations by love for the human form.

I will explore the connections that De Koninck indicates, but does not fully elaborate, between his doctrine of evolution, as developed principally in *The Cosmos*, and his theological principles of gift-of-self, circular order, and mercy, as further developed in *Ego Sapientia*.

The argument is divided into four steps. In the first step, I will lay out De Koninck's treatment of evolution in *The Cosmos* (Chapters One through Four). In the second step, I will consider De Koninck's treatment of gift-of-self, circular order, and mercy in the Trinity, creation, and Incarnation as portrayed principally in *Ego Sapientia* and *The Cosmos* (Chapters Five and Six). In the third step, I will unfold some of the connections between De Koninck's evolutionary biology and his theological principles of gift-of-self, circular order, and mercy. I will develop the theological implications in a creative appropriation (Chapter Seven). In the fourth step, I will conclude with a critique and evaluation of his contribution (Chapter Eight).

CHAPTER ONE:

THE SCIENTIFIC POINT OF VIEW

1. Introduction to The Cosmos

De Koninck's book, *The Cosmos*, can be read as an extended argument that evolution is intensely teleological, or goal oriented. The good is the cause of everything, because it is the cause of the causality of the other causes. The common good of the universe is the goal of cosmic history; it drives the mechanism of evolution as the final cause of all motion.

The Cosmos was written very early in his scholarly life, in 1936, but De Koninck never officially published it. It was written only two years after his doctoral dissertation on the philosophy of the physicist, Sir Arthur Eddington. It shows his continuing interest in thinking philosophically about the discoveries and theories of contemporary science. It contains many themes that De Koninck continued to ponder in his later writings. However, although he wrote a number of articles that touch on aspects of evolution, he never wrote another piece of such length on evolution. He did, however, publish two articles that contained the same doctrine about evolution explicitly although briefly at almost the same time as *The Cosmos*. The first, "The Problem of Indeterminism," was delivered at a conference in 1935 and then published, as was the second, "Reflections on the Problem of Indeterminism," in 1937.¹

¹ "Le problème de l'indéterminisme," read at the Académie Canadienne Saint-Thomas d'Aquin in its session of October 9-10, 1935. It was published in the proceedings of that conference *L'Action sociale catholique*, (1937), 65-159. "The Problem of Indeterminism," in *The Writings of Charles De Koninck* volume 1 (Notre Dame, Indiana: University of Notre Dame Press, 2008), 353-400. "Réflexions sur le

It could be asked if De Koninck never published *The Cosmos* because he changed his mind about the theory of evolution. However, there are strong grounds for believing that he did not. He directed a dissertation on evolution by Abbe Otis in 1950, which agrees with the doctrine of *The Cosmos*. The last dissertation that he directed, *The Perfection of the Universe* by Oliva Blanchette (May, 1965), also contained the most essential aspects of his doctrine on evolution. De Koninck submitted a portion of *The Cosmos*, “The Cosmos as Impulse towards the Life of Thought” in 1962 for a retrospective volume of his work.² When his son and disciple, Thomas De Koninck, was asked about this question, in 2008, he said definitively that his father had never changed his mind about evolution.³ Charles De Koninck believed to the end of his life that science has effectively demonstrated evolution.

De Koninck divides *The Cosmos* into three major sections that discuss evolution from three points of view: the scientific, the philosophical and the theological. The philosophical section is twice as long as the scientific section and almost four times as long as the unfinished theological section. In the *Scientific Point of View* De Koninck summarizes scientific theories of cosmic and biological evolution and their basis in astronomical, paleontological and biological observations. He remains within the realm of the observable and measurable aspect of things. In the second section, *The Philosophical Point of View*, he considers nature from a more general point of view that begins with common experience, language about nature, and the most certain and general notions about nature.⁴ Then he tries to make sense of evolution in light of these general notions. In the third section, *The Theological Point of View*, he considers what light revelation can throw on evolution.

problème de l'indéterminisme,” *Revue Thomiste*, vol. 45, t. 63, (1937), 227-252, 393-409 (Henceforth, original in French referred to as “Réflexions”); “Reflections on the Problem of Indeterminism,” in *The Writings of Charles De Koninck* volume 1 (Notre Dame, Indiana: University of Notre Dame Press, 2008) 401-442 (Henceforth, English translation referred to as “Reflections”).

² Charles De Koninck, “Le Cosmos, comme Tendence vers la Pensée,” *Itinéraires*, n. 66, septembre-octobre (1962): 168-188.

³ Thomas De Koninck, interviewed by David Quackenbush, executive director of the Charles De Koninck Project and tutor at Thomas Aquinas College, 2008. Email from David Quackenbush, July 27, 2011.

⁴ *The Cosmos*, 257-263.

In each of the three sections, under each point of view, De Koninck argues that the cosmos only makes sense as a purposeful process towards man. In the scientific section, De Koninck writes, “Science, while being only a flat projection of what has relief and depth, enables us to foresee the immense effort and the prodigious cost nature invests in the preparation for the coming of man. And whether he knows it or not, everything that happens in the world is done for him.”⁵ In the philosophical section, De Koninck writes, “We can then consider the maturation of the cosmos as a tendency toward the thought in which all of its parts are united and lived, the cosmos thus tends to co-penetrate itself, to touch itself in the intelligence of man...”⁶ In the theological section, De Koninck writes, “From this point of view, we can consider the evolution of the cosmos as a maturation of traces which will terminate in an image of the Trinity [in man].”⁷

2. The Necessity of Evolution

De Koninck says that evolution could never have been postulated a priori from philosophical and theological principles. Only empirical evidence can confirm or deny historical fact unless it is revealed or recorded by witnesses.

We constantly use expressions ‘movement’ or ‘the rising élan of life.’ Must we understand a purely static scale of hierarchized beings? A different series of beings of different species which would have been given at once, as they are without the existence of any dynamic link among them, in such wise that the forms with more complex and elevated organization would have appeared last.

It is not to the philosopher that we put the question. Experimental science must answer it. Since it is a matter of responding to a question of fact, it is experimental science that undertakes the research. Even if the philosopher had established what he has to establish, he would not for that reason be able to prevent the scientist from finding out what he finds out. And we should be disposed to believe every explicative theory of observed phenomena, insofar as they are within the

⁵ *The Cosmos*, 256. “La science, tout en n’étant qu’une projection plane de ce qui a relief et profondeur, nous laisse déjà entrevoir l’immense effort et les dépenses prodigieuses que fait la nature en préparation de l’avènement de l’homme. Et qu’il le sache ou non, tout ce qui se fait dans le monde se fait pour lui” (*Le Cosmos*, 25).

⁶ *The Cosmos*, 297. “Nous pouvons donc considérer la maturation du cosmos comme une tendance vers la pensée en laquelle toutes ses parties seront unies et vécues; le cosmos tend ainsi à se compénétrer, à se toucher dans l’intelligence de l’homme” (*Le Cosmos*, 88).

⁷ *The Cosmos*, 330. “À ce point de vue, nous pouvons considérer l’évolution du cosmos comme une maturation de vestiges qui se terminera à une image de la Trinité” (*Le Cosmos*, 126).

bounds of experience and logic. But since we are concerned with experimental phenomena, the theory itself must be formulated in experimental terms. Under these conditions, one finds it difficult to imagine a clash between the philosopher and scientist.⁸

De Koninck is saying that the scientist needs to be free to discover all that he can discover by his legitimate tools of observation, experiment, and deduction. Even if the philosopher argues to the same conclusion, he does not eliminate the value of the scientists' evidence. De Koninck evidently regards the empirical evidence to be compelling enough to make it reasonable to consider "evolution of the universe by expansion,"⁹ of "planetary systems,"¹⁰ of "the chemical elements,"¹¹ of "life,"¹² and finally of "man"¹³ as probable, and therefore worthy of pondering as a philosopher and theologian.

Later, in *Reflections on the Problem of Indeterminism* (1937), De Koninck seems to regard evolution as a necessary conclusion of natural philosophy. He compares its certitude to the certitude we have about the hylomorphic composition of bodies.

Philosophy of nature, being *scientia certa per causas*, can only attain what is essential and necessary to nature, such as the hylomorphic composition of natural substances, the contingency this composition entails, the necessity of evolution, the necessity of humanity as the ultimate end of this ascension of the world, etc. In short, what one can establish with rigor are what Maritain calls *philosophical facts*.¹⁴

⁸ *The Cosmos*, 247-248. "Nous avons constamment employé les expressions: 'mouvement' ou 'élan ascendant de la vie'. Faut-il entendre par là une échelle purement statique d'êtres hiérarchisés? Une série d'êtres d'espèces différentes, et qui auraient été données d'emblée telles qu'elles sont, sans qu'il existe entre elles un lien dynamique. Ou bien faut-il la distribuer dans le temps, de telle sorte que les formes les plus complexes et les plus élevées en organisation seraient apparues les dernières?"

Ce n'est pas au philosophe que nous posons cette question. C'est la science expérimentale qui devra répondre. Puisqu'il s'agit de répondre à une question de fait, c'est à la science expérimentale que revient cette recherche; même si le philosophe avait déjà établi ce qu'il a établi, il ne pourrait par cela empêcher le savant d'avoir constaté. Ce qu'il a constaté. Et nous devons être disposés à accepter toute théorie explicative des phénomènes observés, dans la mesure où nous y sommes contraints par l'expérience et la logique. Mais, puisqu'il s'agit de phénomènes expérimentaux, la théorie elle aussi devra être formulée en termes expérimentaux. Dans ces conditions on peut difficilement concevoir un conflit entre philosophes et savants" (*Le Cosmos*, 14-15).

⁹ *The Cosmos*, 237. "évolution d'univers par expansion" (*Le Cosmos*, 4).

¹⁰ *The Cosmos*, 239. "systèmes planétaires" (*Le Cosmos*, 6).

¹¹ *The Cosmos*, 240. "Les éléments chimiques" (*Le Cosmos*, 7).

¹² *The Cosmos*, 240. "vie" (*Le Cosmos*, 7).

¹³ *The Cosmos*, 245. "l'homme" (*Le Cosmos*, 12).

¹⁴ "Reflections," 435; emphasis in original. "La philosophie de la nature étant *scientia certa per causas*, ne peut atteindre que ce qui est essentiel à la nature et nécessaire, telle la composition hylémorphique des substances naturelles, la contingence qu'entraîne cette composition, la nécessité de l'évolution, la nécessité de l'humanité comme fin dernière de toute cette ascension du monde, etc. Bref,

In this passage, De Koninck claims the necessity of “philosophical fact” for evolution. He seems to place its certainty on a level with the certainty of the hylomorphic composition of bodies, the contingency of bodies, and the directedness of the cosmos toward man.¹⁵

De Koninck maintains that once one sees the evidence that lower living forms preceded the higher in history, one grasps that evolutionary development fits better with the nature of bodies. It is fitting for the cosmos as a whole to develop the way a living individual does from imperfect to perfect being through the causality of other substances. It is natural for hylomorphic substances to develop gradually from imperfect to perfect; it is unnatural for a hylomorphic substance to be perfect from the first moment of generation. Nevertheless, evolution does not have the certitude of the hylomorphic nature of bodies.

3. The Division between Scientific and Philosophic Point of View

In *The Cosmos*, De Koninck distinguishes science sharply from philosophy, which he treats in the next section. He says that he means by the scientific point of view what is commonly called science today, the realm of the observable and measurable.

I remind you that in this part I am speaking from the scientific point of view. The philosopher can only reproach me if he confuses science and philosophy, a worse error, it seems to me, than that for which he reproaches me. The profound distinction between these two domains will appear more clearly when we will have studied the same problem from a strictly philosophical point of view.¹⁶

tout ce qu'on peut établir avec rigueur sur ce que M. Maritain appelle des *faits philosophiques*” (“Réflexions,” 406).

¹⁵ This is the contradiction of his statement in *The Cosmos*; it is also false. The discoveries of paleontology can never be as certain as our first-hand sensible knowledge of bodies. Common descent can never be as certain as the existence of change. Therefore the theory constructed to explain them cannot be as certain.

¹⁶ *The Cosmos*, 255. “Je tiens à rappeler que je commente dans ce chapitre le point de vue scientifique. Le philosophe ne pourrait me faire des reproches que si lui-même a confondu science et philosophie. Erreur plus grave, me semble-t-il, que celle qu’il nous reprocherait. Incontestablement plus grave au point de vue méthodologique, car, faire de la science en philosophie, c’est implicitement nier l’existence même du point de vue philosophique. La distinction profonde des deux domaines apparaîtra plus clairement lorsque nous aurons étudié le même problème d’un point de vue strictement philosophique” (*Le Cosmos*, 23).

De Koninck tells us that experimental science involves properties that can be measured. It must allow making and testing predictions. Scientific laws are expressions of the relationships discovered between measured quantities.

Experimental biology is an exact science. Experimental sciences can be called exact to the degree that they allow us to make predictions. It is in this sense that physics can be called the most exact of the experimental sciences. In astronomy we can predict eclipses which will not occur for centuries within a fraction of a second. Experimental science is essentially metric. It can only define properties by a description of the process of measuring them. No experimental law—an algebraic relation between two number-measures—is absolutely rigorous. However, as a group, strictly physical laws are more rigorous than biological laws.¹⁷

De Koninck is making a radical claim. He says that experimental science can only define properties by describing the operation of measuring the property. For example, length is the result of comparison with a rod that is like the meter rod in the vault in Paris. There is a serious difficulty with De Koninck's claim. It is especially difficult to maintain in biology. How could one define "life" by an operation that measures it, and what would it mean to measure life?

In *Reflections on the Problem of Indeterminism*, written in 1937, a year after *The Cosmos*, De Koninck still restricts experimental science to what can be measured by a physical operation.

Confined from the outset to the domain of common sensibles which are all reducible to quantity, having for *formal subject* the measurable aspect of things *as measured*, and the quantitative measure from which it proceeds being found on homogeneous exteriority, experimental science can only touch nature from without and can never go behind what is outside. Being able to attain its object only by means of an artful operation—the scientist makes experiments—it can only arrive at a concept based on the measurements effected by the repetition of experiences.¹⁸

This is very similar to what De Koninck writes in *The Cosmos*. Experimental science is restricted to quantitative measures of the *exterior* of natural things and their relations. The

¹⁷ *The Cosmos*, 246-247. "La biologie expérimentale est une science exacte. Mais nul doute qu'elle ne peut atteindre à la rigueur de la physique expérimentale. La *science* expérimentale est essentiellement métrique. Elle ne sait définir les propriétés que par la description de leur procédé de mesure. Aucune loi expérimentale – relation algébrique entre des nombres-mesures – n'est absolument rigoureuse. Cependant, dans l'ensemble, les lois strictement physiques sont plus rigoureuses que les lois biologiques" (*Le Cosmos*, 14).

¹⁸ "Reflections," 425. "Cantonée dès l'abord dans le domaine des sensibles communs qui sont tous réductibles à la quantité; ayant comme *sujet formel* l'aspect mesurable des choses *en tant que mesuré*; et la mesure quantitative dont elle procède étant fondée sur une extériorité homogène, la science expérimentale ne peut aborder la nature que du dehors et elle ne pourra jamais aller au delà de ce dehors. Ne pouvant atteindre son objet qu'à travers une opération d'art—le savant *fait* des expériences—elle ne peut jamais parvenir qu'à un concept appuyé sur des mesures effectuées et sur la répétition des expériences" ("Réflexions," 394-395).

exterior, for De Koninck, means not just the surface of bodies; the numbers of electrons in a shell of an atom or the DNA strands in a cell are just as exterior. The “without of nature” is all of the observable or measurable aspects of things as opposed to their interior aspects like life or purpose or feelings or thoughts or what makes them to be one sort of thing rather than another. However, in later works, De Koninck indicates that the distinction is more a matter of convenience than essential. Nor does he keep the distinction tightly even in *The Cosmos*.

It is of course true that no single individual can in our time ever hope to know the whole of even a single ramification of natural science, such as astronomy and botany, nor even list the unlimited number of questions men may eventually learn to ask about a relatively narrow domain of nature. Yet no matter how general or how particular, how certain or provisory, knowledge about nature will always be derived from, and must return to, experience, external or internal. In each and every case, if the knowledge is to be of nature, the descriptions and definitions, no matter of what kind, must in the end include sensible matter. It does not seem possible therefore to set a rigid frontier between philosophy of nature and science of nature.¹⁹

De Koninck refers to Aristotle and St. Thomas’s method of dividing the sciences. They divide the sciences according to their formal subject matter. According to this division, experimental science and natural philosophy must be different parts of the same science since they both include sensible matter in their definitions.

Not only is it impossible, according to De Koninck in later years, to set a “rigid frontier” between science and philosophy of nature, the scientist who attempts to do science without any broad reflection results in absurdity. In his article, “Is the Word “Life” Meaningful?” (1962), De Koninck mocks biologists who cannot define life: “The typical modern biologist, resolved never to betray the methods of his science, when requested to tell us what he means by “life,” finds the question an exceedingly awkward one.”²⁰ He gave the provocative title “The Lifeless World of Biology” to a lecture later published in *The Hollow Universe*, in which he addresses the question

¹⁹ Charles De Koninck, “The Unity and Diversity of Natural Science” in *The Philosophy of Physics*, St. John’s University Studies, Philosophical Series, n. 2, ed. by Vincent E. Smith (New York: St. John’s University Press, 1961), 5-24.

²⁰ Charles De Koninck “Is the Word “Life” meaningful?” in *Philosophy of Biology*, St. John’s University Studies, Philosophical Series, n. 3, ed. by Vincent E. Smith (New York: St. John’s University Press, 1962), 77

why biologists try to explain all the phenomena of life in terms of the inorganic.²¹ According to De Koninck, a biologist cannot really do biology without making broad observations that begin with our common understanding of life, sensation, and organ. He could not decide whether he should study stones or horses if he did not begin with a very general idea of living and nonliving.

But how do we know that horses are alive and that stones are not? I do not know what horses experience on the subject, but I observe that they are not indifferent to it, a fact which I gather from their obvious concern for what will promote and sustain life, a concern not present in tractors, though both haul loads. Call life what you will, in some measure I know what it is to enjoy it, in my own being and person. I know I am alive as I use my senses. My sensations are of all kinds, external and internal; and I know very definitely that I have them, and know that I know this.²²

In this passage, De Koninck refers to his own internal experience of life as essential for the study of biology. Without an experience of life, we could not distinguish living from nonliving beings, nor living activities like a horse pulling a wagon from inanimate activities like a tractor pulling a trailer. Despite his strong claims about the distinction between experimental science and philosophy in *The Cosmos*, in his actual words in the scientific section, De Koninck includes much more than measuring quantities in bodies and their motions and devising models to explain them. He uses the kind of judgment of experience he refers to in his later papers on biology that allows one to distinguish between living beings and nonliving, between plants and animals, and between lower and higher animals. He sees certain trends and patterns and describes them and interprets them. He makes broad observations and conclusions about nature based on scientists' observations and theories. He looks at cosmic history as revealed in the most recent findings of science and tries to see it as a whole; he relates cosmological beginnings to life, primitive life to complex life, and pre-human life to man. In this scientific section, he does not yet attempt to understand the observed facts in their ultimate causes as he does in the philosophical section, but

²¹ Charles De Koninck, "The Lifeless World of Biology" in *The Hollow Universe*, The Whidden Lectures, Series IV (Québec: Les Presses de L'Université Laval, 1964), 79-114.

²² Charles De Koninck, "Is the Word "Life" Meaningful?" 82.

to find recognizable patterns that should be evident to any scientist who is not afraid to admit that there is increasing complexity, interiority, and purpose in cosmic history.²³

De Koninck discusses the views on evolution of those figures he took to be most sensible and authoritative among the scientists of his day. The astronomers' observations of the expansion of the universe, the paleontologists' observations of the succession in time of more and more complex organisms, and the common observation that living things are born from living things are the reasons for De Koninck's theological and philosophical speculation about evolution in the following sections of the book. His reasons for supposing evolution has taken place come from the data proper to the experimental sciences although that data could not be interpreted without some integration with philosophy of nature.

4. Examining the Scientific Evidence for Evolution

A. Cosmic Evolution

De Koninck discusses the evidence for Lemaitre's theory of the expansion of the universe, now popularly known as the Big Bang theory.²⁴ Support for Lemaitre's theory comes from the discovery of the uniform receding of the spiral nebulae from the earth at a velocity of many thousands of miles per second. Lemaitre conceived of the universe as though the nebulae were points on a balloon that was inflating. He supposes that the expanding universe must have once been condensed in a massive primeval atom of matter. It would have contained all the matter now

²³ Many contemporary scientists attempt to take such a broader view of their scientific findings. Astronomers Guillermo Gonzales and Jay W. Richards in *The Privileged Planet: How our Place in the Cosmos is Designed for Discovery* (Washington D.C.: Regnery Publishing, Inc., 2004); physiologist J. Scott Turner in *The Tinkerer's Apprentice: How Design Emerges from Life Itself* (Cambridge, Massachusetts: Harvard University Press, 2007); evolutionary biologist Stephen Conway Morris in *Life's Solutions: Inevitable Humans in a Lonely Universe* (Cambridge: Cambridge University Press, 2003); geophysicist James Lovelock in *The Ages of Gaia: A biography of our Living Earth* (London: Q.Q. Norton & Company Ltd., 1988) among many others take a careful look at findings in their field and discover patterns and make judgments about the meaning of the patterns. Robert Augros and George Stanciu are philosophers who approach biology with a philosophical viewpoint: *The New Biology: Discovering the Wisdom in Nature* (Boston and London: New Science Library Shambhala, 1987).

²⁴ Named by Fred Hoyle in 1949.

spread through the whole universe. This leads to the idea of a beginning to both space and time.²⁵ The concentrated mass exploded, leading to the dispersion of the matter “like smoke produced by some colossal explosion.”²⁶ This explosion was the beginning of space as particles of matter moved out. The Big Bang was also the beginning of time, which measures the motion of matter, since there was no motion or matter before the explosion. De Koninck finds the arguments convincing, and a very similar version is still the most prevalent theory among scientists today.²⁷

B. Nebulae and Stellar Evolution

The diffused fragments are subject to two forces, De Koninck explains: “the gravity by which bodies attract one another and the cosmic repulsion...which tends to distance bodies proportionally from one another.”²⁸ Gravity is responsible for the formation of nebulae from the particles, because expansion will not be perfectly uniform; there will be areas of greater density where gravity will take the upper hand and lead to conglomerations or nebulae. Some of the

²⁵ Although the evidence points to a primordial big bang, we cannot be sure that it was the first cosmic explosion. We have no way of knowing what happened before the Big Bang. Both Aristotle and St. Thomas argue that creation (in the sense of the dependence of all beings on the First Cause for their existence) is philosophically knowable, but not creation in time. It is from Scripture that we know of creation in time, and it tells us nothing about whether the Big Bang that we detect is the moment of creation. For the dependence of being on a universal cause of being, see Aristotle, *Metaphysics* II.1 (993b30). Aristotle’s regards the eternity of the world as a dialectical or probable rather than scientific or demonstrative argument, and among dialectical arguments as one of particular difficulty and uncertainty (*Topics*, I.1 [104b12-17]). For St. Thomas’ account of creation, see *ST* I 44.1. For arguments for and against the eternity of the world, see *ST* I 46.1.

²⁶ *The Cosmos*, 238; citing Georges Lemaître, *L’Univers en Expansion* (Louvain: Revue des Questions Scientifiques, 1935), 357-75.

²⁷ I will note a few contemporary scientists to show that De Koninck’s judgments about evolution are not obsolete. “The synthesis of the past one hundred years in cosmology is the “standard cosmological model.” It holds that the universe began as a hot, dense, compact state about 15 billion years ago. Then the universe was infinitely or almost infinitely dense, infinitely or almost infinitely hot...For reasons we may never know, the universe exploded and has been expanding and cooling ever since.” Leon Lederman with Dick Teresi, *The God Particle: If the Universe Is the Answer, What Is the Question?* (New York: Houghton Mifflin Company, 1993), 384; Paul Davies, *The Cosmic Blueprint: New Discoveries in Nature’s Creative Ability to Order the Universe* (Philadelphia and London: Templeton Foundation Press, 1988), 125; Eric J. Chaisson, *Cosmic Evolution: The Rise of Complexity in Nature* (Cambridge, Massachusetts: Harvard University Press, 2001) 120.

²⁸ *The Cosmos*, 238. “la gravitation par laquelle les corps s’attirent, et la répulsion cosmique... qui tend à éloigner les corps proportionnellement les uns des autres” (*Le Cosmos*, 4-5).

particles in the nebulae will be drawn together and conglomerate into stars.²⁹ No other force can come into action until particles are close enough to each other to act on each other. Thus gravity and the random fluctuations of density are responsible for the clumping that is the prerequisite to the evolution of all the complex structures of the cosmos.

C. Planetary Evolution

De Koninck discusses current theory about formation of the planetary systems. He notes that the distances between the stars thus formed in the expansion of the universe would be so great that they would seldom collide, but it would happen in rare cases. Our planetary system, De Koninck thinks, is probably the result of such a cosmic *accident*. Another star came so close to our sun that it pulled away “an enormous flood of matter”³⁰ which cooled and condensed into our planets including the Earth. Life could never have been possible in the universe without such an accident. As long as matter remained in gigantic masses like the stars it would have remained at temperatures of millions of degrees. Only a planet with a narrow and much cooler temperature range and a very particular mixture of gases in its atmosphere could make life possible. These conditions are still thought to exist on only a few planets; we still know of no other planet that has life.³¹

D. Chemical Evolution

Next De Koninck discusses the formation of the chemical elements as a preparation for life. “Lately come in the universe, we find the 92 elements already constructed. But no doubt they

²⁹ Cosmologists today still see the role of gravity as essential. For example, Paul Davies writes: “Of the four fundamental forces of nature only gravitation acts across cosmological distances. In this sense, gravity powers the cosmos. It is responsible for bringing about the large-scale structure of the universe, and it is within this structure that the other forces act out their roles.” *The Cosmic Blueprint*, 133.

³⁰ *The Cosmos*, 240. “une énorme marée de matière” (*Le Cosmos*, 7).

³¹ Brown and Lee wrote *Rare Earth* to argue that the conditions for complex life are immensely improbable. Peter D. Ward and Donald Brownlee, *Rare Earth Why Complex Life is Uncommon in the Universe* (New York: Copernicus, 2000). Also see Guillermo Gonzalez and Jay W. Richards, *The Privileged Planet; How Our Place in the Cosmos Is Designed for Discovery* (Washington D. C.: Regnery Publishing Inc., 2004).

resulted from an evolution whose history remains almost unknown.”³² The development of carbon in particular was crucial for the evolution of life. The six bonds of carbon allow it to assemble in massive chains. “It is these complex edifices which furnish us the matter necessary for life.”³³

E. Evolution of Life

De Koninck notes that the degradation of the universe from its initial state of “extreme concentration and physical organization”³⁴ in the primeval atom leads to the dispersal of matter and energy in the universe over time. But this disorganization of the physical elements makes possible the new superior organization of living things.

Life opposes the current of disorganization by progressing towards more and more complicated organization. Like a set of building blocks, the matter of the universe must first be unpacked so that it can be used to build organisms. Inorganic matter serves for the construction of something higher, living things. De Koninck uses the surprising term *sacrifice*. “One might say that the inorganic universe is assumed into life by *sacrificing* itself to it.”³⁵ Life consumes the inorganic. Plants use the inorganic immediately; water, minerals, and air. Animals can only use inorganic substances as food if they are first transformed into organic material by plants or other animals. In general higher living things feed on lower. “Life is organized by disorganizing that which is lower than the level attained”³⁶ The term sacrifice usually refers to a voluntary gift. It is noteworthy that De Koninck uses it for subhuman things even when they are being passively used by a kind of violence such as when they are eaten.

³² *The Cosmos*, 240. “Tard venus dans le monde, nous trouvons les 92 éléments chimiques déjà tout construits. Mais nul doute qu’ils résultent d’une évolution dont l’histoire reste à peu près inconnue.” (*Le Cosmos*, 7).

³³ *The Cosmos*, 240. “Ce sont ces édifices complexes qui nous fournissent la matière nécessaire à la vie.” (*Le Cosmos*, 7-8).

³⁴ *The Cosmos*, 241. “concentration et d’organisation physiques extrêmes” (*Le Cosmos*, 8).

³⁵ *The Cosmos*, 242. “On dirait que l’univers inorganique est assumé dans la vie en se sacrifiant à elle” (*Le Cosmos*, 10).

³⁶ *The Cosmos*, 243. There are exceptions like alligators feeding on deer but they strike us as grotesque and unnatural. “La vie s’organise en désorganisant ce qui est inférieur au niveau atteint” (*Le Cosmos*, 10).

Life depends on the rhythm of gift and reception; the lower must be sacrificed for the higher. The environment becomes impoverished so that higher beings can be enriched. Pascal Ide remarks on the theme of sacrifice in De Koninck's *The Cosmos* in his perceptive article, "La Philosophie de la Nature de Charles De Koninck."

The cosmology of Charles De Koninck accords an unexpected place to the notion of sacrifice... The evolutionary current enlists the organic in a manner partially sacrificial... Destruction makes sense only in service of a superior realization.³⁷

Destruction is reread as sacrifice because the impulse of evolution is toward a goal that fulfills all of Nature.

On the other hand, the physical world is not simply "juxtaposed"³⁸ to the biological world. Living things belong to the physical world just as much as rocks and water. We distinguish the living from the nonliving because physical laws do not suffice to explain the properties and activities of living beings. "There are phenomena which, without being against physics, oblige us to formulate laws proper to living beings: the formally biological laws."³⁹ For example, living beings nourish themselves and reproduce themselves. They must metabolize or die. These distinct activities must have some ontological basis, which De Koninck will treat of, in his philosophical section.⁴⁰

De Koninck sees the dispersal of matter and energy in the cosmos and its new concentration in living beings as part of life's progress "against the grain and at the *expense* of the current of degradation that carries the physical world toward extinction."⁴¹ The tendency toward disorder,

³⁷ Pascal Ide, "La Philosophie de la Nature de Charles De Koninck," *Laval Théologique et Philosophique*, 66, 3 (Octobre 2010): 486-489.

³⁸ *The Cosmos*, 243. "juxtaposes" (*Le Cosmos*, 11).

³⁹ *The Cosmos*, 243. This portion of chapter 7 is not in the French version.

⁴⁰ Scientists who write about emergent evolution focus on the new laws that are determinative of emerging phenomena. For example, see Jacob Klapwijk, *Purpose in the Living World: Creation and Emergent Evolution*, trans. and ed. Harry Cook (Cambridge: Cambridge University Press, 2008), 120.

⁴¹ *The Cosmos*, 242. "à rebours et aux dépens du courant de dégradation qui emporte le monde physique vers l'extinction" (*Le Cosmos*, 10).

described by the Law of Entropy, which “at the same time is an *impoverishing* equilibrium”⁴² becomes “*enriching* from the biological point of view.”⁴³

Pascal Ide also notes the repetition of the words *rich* and *poor* in De Koninck:

The vocabulary of wealth and poverty seems to me unusually present with Charles De Koninck...The Canadian philosopher combines therefore the classical vocabulary of generation and corruption with that of wealth and poverty...The frequency alone (even though modest) of this vocabulary would not have sufficed to arouse my interest, if it had not been stimulated by...Ferdinand Ulrich...the difference between poverty and wealth, irreducible to all others...constitutes the first distinction qualifying love.”⁴⁴

Pascal Ide understands the vocabulary of poverty and wealth in De Koninck to point to love, because the lower organism hands itself over to be used by the higher.

One already sees in De Koninck’s treatment of the scientific point of view an interpretation of the data. His phrases, such as “Life seems to progress,” “ascending impulse,” and “enriching from the biological point of view,”⁴⁵ contain an evaluation of the direction of cosmic history. Later beings are higher and enriched. De Koninck shows us a scientific point of view that is distinct from the philosophical; it depends on the collaborative observations and theories of hundreds of scientists working with complex instruments; yet it already contains significant fruit for understanding the cosmos. De Koninck finds a direction or trend to cosmic history that is incontrovertible and positive. There is an ascending movement or impulse in the universe, which brings forth higher and higher beings.

F. Organization and Spontaneity

De Koninck also notes that we can observe that there are different species of living beings in a hierarchical order; some species are more highly organized than others and can perform higher activities. He uses the degree of spontaneity in living things as a measure of their perfection.

⁴² *The Cosmos*, 241; emphasis added. “est en même temps un équilibre appauvrissant” (*Le Cosmos*, 8).

⁴³ *The Cosmos*, 242; emphasis added. “enrichissante au point de vue biologique” (*Le Cosmos*, 10).

⁴⁴ Ide, “La Philosophie,” 489-490.

⁴⁵ *The Cosmos*, 242 “La vie semble progresser,” “élan ascendant,” “enrichissante au point de vue biologique,” *Le Cosmos*, 10.

Just as there are opposing currents in the physical and biological realm with regard to entropy and organization, there are also opposing currents with regard to organization and predictability. As the physical cosmos expands, disorder and unpredictability increase.

The primitive atom was more determined, more ordered than are its dispersed fragments. The more this universe is released and scattered, the more difficult it becomes to predict the behavior of physical entities. Let us say that this scale of unforeseeability is proportional to the degree of entropy, entropy being a measure of disorder. At a given moment t , there is less chance in the universe that at any later moment t' .⁴⁶

In De Koninck's view, the first phase of expansion would have been most ordered and predictable by the laws of physics. As disorder increased there would be more room for chance and unpredictability.

For the biologist, on the other hand, the reverse is true. As order and organization increase in living things, spontaneity also increases. "In living things, spontaneity emanates from the subject, resulting from an interior integration: spontaneity is the measure of the degree of interiority."⁴⁷ The activities of a man are less predictable than those of a bird, and the activities of a bird less predictable than those of an oak tree. "It is thus possible to say that there runs through the scale of cosmic living things a *tendency* toward the liberty realized in man."⁴⁸

There is no true freedom in cosmic beings lower than man. True freedom must be rooted in a spiritual being. However there are gradations of spontaneity in nature that correspond to degrees of organization. A rock that is released must fall down; its nature determines it to that motion. A man, however, can stand up or sit down when he wishes. His free decision is the origin of his motion. Between the two extremes there are many levels. A sunflower bends toward the sun; a lion chases gazelles. "One meets in the plant and animal kingdoms an *ascending* gradation of

⁴⁶ *The Cosmos*, 244. "L'atome primitif était plus déterminé, plus ordonné que ne l'est l'ensemble de ses fragments dispersés. Plus cet univers est délié, éparpillé, plus il devient difficile de prédire le comportement des entités physiques. Disons qu'à cette échelle l'imprévisibilité est proportionnelle au degré d'entropie, l'entropie étant la mesure du désordre. À un moment quelconque, il y a moins de hasard dans l'univers physique qu'à un moment t' postérieur quelconque" (*Le Cosmos*, 11-12).

⁴⁷ *The Cosmos*, 245. "Dans les vivants la spontanéité émane du sujet, elle résulte d'une intégration intérieure: la spontanéité est la mesure du degré d'intériorité" (*Le Cosmos*, 12-13).

⁴⁸ *The Cosmos*, 245; emphasis added. "Il est donc permis de dire que l'échelle des vivants cosmiques est parcourue par une tendance vers la liberté réalisée dans l'homme" (*Le Cosmos*, 12).

spontaneity, which, if it could be pushed high enough would be freedom.”⁴⁹ Living things act from themselves more profoundly the higher their nature is. Movements, directed by instincts, in which the animal possesses the sensible form according to which it moves itself, replace plant tropisms, which respond to stimuli such as the presence of light, water, or gravity. Man freely chooses to move himself according to intellectual knowledge. He alone can understand the end and can measure the efficacy of the means against the end.

De Koninck speaks here of a *tendency* toward liberty and *ascending* gradations of spontaneity. He has spoken of higher types following lower types in time, but he has not yet given evidence that there is an organic *development* from lower to higher as opposed to a static hierarchy. He has not shown that higher species evolve from lower, i.e., are generated by lower species.

G. Theories of Biological Evolution

De Koninck turns to Brother Marie-Victorin for a specialist’s presentation of the evidence for evolution. The botanist first points out what paleontologists have discovered in the fossil records: simpler living forms appeared on earth before higher more complex organisms. Second, he reminds us that only living things generate living things. If these facts are put together,

The conviction that the different living types ought to develop not only the one *and* the others, but the one *from* the others ... takes on the dimension of a positive logical postulate. The certitude of the reality of organic evolution would only be upset if experience taught us in the future that an individual organism could arise otherwise than by plasmic continuity, or that all the vital types, the living and the disappeared, existed at the same time at the beginning. No other argument could weaken the logic of the idea of organic evolution.⁵⁰

⁴⁹ *The Cosmos*, 245; emphasis added; translation modified. “On trouve donc dans le règne végétal et animal une gradation ascendante de spontanéité, laquelle, si elle pouvait être poussée assez haut, deviendrait liberté” (*Le Cosmos*, 12).

⁵⁰ *The Cosmos*, 249; citing Brother Marie-Victorin, *Flore Laurentienne* (Montreal, 1935), 63; emphasis added. “La conviction que les différents types vivants doivent s’être développés non seulement les uns après les autres, mais les uns des autres, autres, prend les proportions d’un postulat logique positif. La certitude de la réalité d’une évolution organique ne pourrait être ébranlée que si l’expérience nous enseignait à l’avenir qu’un organisme individuel peut naître autrement que par continuité plasmatique, ou que tous les types vitaux, vivants ou disparus, existent en même temps dès l’origine. Aucun autre argument ne pourrait affaiblir la logique de l’idée de l’évolution organique” (*Le Cosmos*, 16).

De Koninck accepts Victorin's argument in this passage that we must posit that later more complex organisms have descended from earlier lower organisms unless we should discover that complex organisms could arise spontaneously from inorganic matter or that all the species of the world, including those that are now extinct, existed together at one time. He does not even entertain the possibility that God created successively more complex organisms in successive eons by many instantaneous acts of creation.⁵¹

De Koninck says that a satisfactory scientific theory should "allow us to explain the temporal and hierarchical succession of these types of organization. It is necessary to find the laws which govern this ascendant movement: laws which should be formulated in experimental terms, whatever be the ontological demands conditioning these laws."⁵² A good scientific theory of evolution, according to De Koninck should allow us to explain the ascent of higher life forms in time. It must formulate laws, which can be confirmed or disproven by observation and experiment. An explanation must suppose causal links between the generations of organisms, otherwise one can only describe and classify. No inner cosmic causes (i.e. causes available to the scientist as explanatory) could explain the rise of higher life forms if they did not come from lower forms.

⁵¹ Further evidence for evolution includes the anatomical similarity of organisms that allows one to group them inside of progressively larger groups, homologous organs in different genera, and vestigial homologous organs like toes in horses or leg bones in whales. Evidence for cellular, molecular, and genetic similarity corresponding to classification based on hypothetical ancestry is available today. There is a remarkable similarity of the cells and molecules composing living things of all species, a greater similarity in the genetic code of animals that are hypothetically related by descent, and even similar mistakes in the genetic code in different species that are supposed to be closely related. For evidence for common descent based on classification in groups, anatomical similarities, homologous organs and vestigial organs, see Charles Darwin, *On the Origin of the Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life: A Facsimile of the First Edition* (Cambridge, Massachusetts: Cambridge University Press, 1964) Chapter 13, 411-458; First published (London: John Murray, 1859); For excellent short summary of evidence for evolution, including more recent discoveries, see Gabrielle I. Edwards, *Biology: The Easy Way* (Hauppauge, New York: Barron's Educational Series, Inc., 1990), 288-292. For evidence for common descent based on the same mistakes in genes, see *The Edge of Evolution*, 69-72.

⁵² *The Cosmos*, 249-250. "nous permette d'expliquer la succession temporelle et hiérarchique de ces types d'organisation. Il faut trouver les lois qui régissent ce mouvement ascendant: lois qui devront être formulées en termes expérimentaux, quelles que puissent être les exigences ontologiques conditionnant ces lois" (*Le Cosmos*, 17).

De Koninck presents both Lamarckism and Darwinism as scientific theories that might explain the causes of the ascent of higher organisms from lower organisms. Both Lamarck and Darwin propose a slow continuous process to explain evolution. They differ in the laws they proposed that govern this process. De Koninck considers both theories appropriate to test by observation and experiment. He dismisses Lamarckism because there was no experimental evidence at that time that acquired characteristics are transmitted through generation. Rats' tails had been cut off but their progeny still had tails. Generations of Chinese had bound their girls' feet but the children were still born with normal sized feet.

De Koninck also rejects Darwin's theory of natural selection. Darwin proposes two laws of evolution. First, there is a struggle for existence because every organism produces many more progeny than can subsist on the available food. Therefore, individuals compete with other individuals of the same species, or with individuals of other species, or struggle against the hardships produced by the environment to survive. Second, there is natural selection: those individuals that have some variation or different characteristic which enables them to compete more favorably with other individuals will survive and pass on this characteristic through generations. Small favorable variations are transmitted and very gradually transform a species. Darwin can give no explanation for these original variations. However one can observe slight variations of various characteristics in every population of organisms.

De Koninck accepts the presence of a struggle for existence. It is clear, he says, that if some process of elimination did not check procreation, one bacterium would cover the Earth with its progeny in a short time.

The gigantic combat which troubles the living world is a fact of observation which struck Darwin during his long voyage of exploration in South America and the islands of the Pacific Ocean. And it was necessary to have recourse to a fantastic principle of elimination to explain the relatively restricted number of survivors, for a simple Bacterium would give, by successive partitions, a mass of protoplasm much greater than the earth in less than a month.⁵³

⁵³ *The Cosmos*, 252. "Le gigantesque combat qui travaille le monde vivant est un fait de constatation qui frappa tant Darwin durant son long voyage d'exploration en Amérique du Sud et aux îles de l'Océan Pacifique. Et il faut avoir recours à un principe d'élimination fantastique pour expliquer le nombre

De Koninck agrees with Darwin that there must be a struggle for existence since many more offspring are produced by most species than the earth can support. However, De Koninck reinterprets “the combat” in a positive way either as love for self: “[Living things] affirm themselves, as is evident in their instinct for self-preservation”⁵⁴; or as love for the higher organism: “sacrifice,” when a lower thing nourishes a higher organism. “The inorganic universe is assumed into life by *sacrificing* itself to it...Lower living things feed the higher.”⁵⁵

De Koninck does not accept natural selection for two reasons. First, De Koninck argues that Cuenot’s experiments showed that statistical laws govern survival. It is the average type that survives rather than unique better-qualified individuals. For instance, a large fish will devour an average sampling of minnows rather than just the slower ones.⁵⁶ Second, De Koninck is persuaded by the “missing links” that there is no gradation of intermediate forms in a continuous series from the forms found in the earliest fossils to contemporary forms.

Darwin felt the great difficulties that a slow and continuous evolution entails. But the youth of paleontology allowed him free rein to his imagination. The research pursued is far from having encouraged this hope. The links that permit us to range types in a continuous series are defective in too systematic a manner. A regular irregularity calls for an explanation. Do you not seek links that *often* never existed?⁵⁷

De Koninck finds the links “defective in too systematic a manner” to think that the discontinuity in the fossil record comes simply from lack of sufficient samples. He says later research has not discovered the intermediate fossils that Darwin expected to find. The systematic missing links must point to a mistake in the theory. The changes do not come about gradually but rather by

relativement restreint des survivants, car une simple bactérie donnerait, par bipartitions successives, une masse de protoplasme beaucoup plus grosse que la terre en moins d’un mois” (*Le Cosmos*, 19).

⁵⁴ *The Cosmos*, 245. “Ils s’affirment, ce qui est manifeste, dans leur instinct de conservation” (*Le Cosmos*, 13).

⁵⁵ *The Cosmos*, 242-243. “L’univers inorganique est assumé dans la vie en se sacrifiant à elle... Les vivants inférieurs alimentent les vivants supérieurs” (*Le Cosmos*, 10).

⁵⁶ *The Cosmos*, 252.

⁵⁷ *The Cosmos*, 253; emphasis in original. “Darwin ressentit les grandes difficultés qu’entraînait la croyance en une évolution lente et continue. Mais la jeunesse de la paléontologie lui permettait de donner libre cours à son imagination. Les recherches poursuivies sont loin d’avoir encouragé cet espoir. Les chaînons qui nous permettraient de ranger les types en une série continue font défaut d’une manière trop systématique. Une irrégularité régulière appelle une explication. Ne cherche-t-on pas des chaînons qui *souvent* n’ont jamais existé?” (*Le Cosmos*, 20).

large transitions between types, just as the fossil record shows. These gaps are precisely the reason for the Theory of Punctuated Equilibrium proposed by Niles Eldredge and Steven Jay Gould.⁵⁸

De Koninck suggests that these transitions came about because of large mutations, sudden changes in characteristics that are inheritable. Darwin already knew of mutations, which he called variations. They are the variations in his theory that nature “selects” in natural selection. Darwin thought that they were usually very slight changes, which could only lead to substantial changes in type over huge periods of time. He admitted that natural selection could do nothing without the variations appearing to select.

According to De Koninck, these mutations included not only the small variations which are observed everywhere in nature, but also very large changes in characteristics that account for the sudden leaps in forms that can be observed in the fossil record. The environment exerted some influence on these new types. Certain monstrosities were not able to survive and reproduce but it is not primarily the environment that shapes the new species, according to De Koninck, citing the botanist, Brother Marie-Victorin.

It seems rather that the species, in virtue of a dynamism the essence of which still escapes us completely, and under the stimulus of the environment, produces by chance, in all directions, mutations which themselves have no relation at all to the milieu and utility.”⁵⁹

Organisms have a natural dynamism that regularly produces all kinds of mutations that may or may not be useful. Unusual environmental conditions provoke organisms to produce mutations in various directions; some of which may enable the organism to flourish better under those conditions.

Again, De Koninck quotes the botanist.

There are explosions, sudden breakthroughs of some few: genera, families, orders, classes, which

⁵⁸ Eldredge, N. and Gould, S.J. (1973) “Punctuated Equilibria: An Alternative to Phyletic Gradualism” in *Models in Paleobiology*, ed. T.J.M. Schopf (London: Freeman, 1973), 82-115.

⁵⁹ Brother Marie-Victorin, *Flore Laurentienne* (Montréal, 1935), 63: “Il semble bien plutôt [...] que l’espèce, en vertu d’un dynamisme dont l’essence nous échappe encore complètement, et sous le stimulus de l’environnement, produise au hasard, en tous sens, des mutations qui n’ont en elles-mêmes aucun rapport avec le milieu et l’utilité,” Cited in *The Cosmos*, 254; *Le Cosmos*, 21-22.

explore as it were all the possibilities of a certain formula of organization then return to relative or absolute immobility and sometimes disappear entirely.⁶⁰

Out of the many mutations that occur, some produce a new form of organization, whose many possibilities are then explored by various mutated progeny.

De Koninck formulates a law of mutations on the basis of Marie-Victorin's work. He hypothesizes that organisms tend to produce a certain number of mutations "new characteristics which are fixed and transmissible"⁶¹ in each generation. Mutations are a natural characteristic of living things like organs. Nature intends mutations because it intends the ascent to higher organisms. Some mutations will be unfavorable, some indifferent, and some favorable. Those organisms whose mutations are not too unfavorable will be transmitted to the next generation. Of these mutations, some will be minor like a change in color; others will be quite large. Thus leaps will occur occasionally, producing a new species. (Natural selection is, in fact, part of De Koninck's Law of Mutations, through the back door. The unfavorable mutations will cause organisms to die in the struggle for existence.)

Darwin was unable to posit a cause for mutations (variations in his theory). Today some scientists posit that chance causes all mutations either by the effects of the environment like radiation, or simply by the random mistakes, which happen occasionally in gene replication. Biological processes are not perfect but fail occasionally. Others who dare to take note of the upward trend in evolution toward greater complexity and inwardness suggest hesitatingly that something more than chance may be directing the process, even if it uses chance to produce mutations.⁶² This was what De Koninck proposed.

⁶⁰ *The Cosmos*, 254. "Ce sont des explosions, des expansions soudaines de certains groupes particuliers: genres, familles, ordres, classes, qui explorent pour ainsi dire toutes les possibilités d'une certaine formule d'organisation pour retourner ensuite à l'immobilité relative ou absolue, et quelquefois disparaître entièrement" (*Le Cosmos*, 22).

⁶¹ *The Cosmos*, 253. "des caractères nouveaux, fixes et transmissibles" (*Le Cosmos*, 21).

⁶² British paleobiologist Simon Conway Morris writes about the amazing number of convergences in evolution, especially the emergence of sentience through different evolutionary pathways. He writes convincingly, for example, that camera eyes, such as those humans possess, evolved separately several times among such diverse groups as cephalopods, snails, and earthworms, as well as in mammals. He finds several *trends* in evolution supported by many papers of scientists around the world. Such trends include

H. Evolution after Man

Surprisingly, De Koninck talks about evolution continuing in man in the penultimate paragraphs of the scientific section. Unfortunately, his remarks are sparse and unclear. He does not expect any further essential leaps to a superman since he believes the form of man was the original goal of nature and the whole process of evolution. However, he sees development on the spiritual and cultural plane as a continuation of evolution, though he does not explain in this section what this development is.

Moreover, evolution which continues in humanity has taken on a different color. It no longer proceeds by essential jumps. We find ourselves now on a spiritual plane where plasticity is infinitely greater within the same essential degree. There rises now a quite new type of hierarchization, more profound, more essential. At a subhuman level the world could only enrich and hierarchize itself thanks to essential ruptures of equilibrium, thanks to violent changes.⁶³

De Koninck may be thinking of the cultural development from Stone Age man to civilized man and the expansion of scientific and historical knowledge of the cosmos and its history. Man's increase in scientific knowledge of the universe is an observable phenomenon as much as the phases of the moon; it is part of cosmic history. By hierarchization, he may be speaking of the development of great men like Aristotle or Mozart. There is no leap to a new species, no "essential rupture," but there is a hierarchy of men according to their wisdom and virtue or talents. There has also been development from one generation to another by teaching, such as from Socrates to Plato to Aristotle, or from Hayden to Mozart. He admits that this development has not been a smooth process upward. Fallen nature introduces corruption, which slows down or stops the development at many points. There may even have been long periods of degeneration in

body size increase in large taxa over geologic time, development of more and better sense organs, warm-bloodedness, and larger more complex brains. "Yet trends imply directionality, and perhaps progress." One trend might not prove purpose and order but omnipresence of trends is difficult to square with randomness and chance. *Life's Solutions*, 304.

⁶³ *The Cosmos*, 254-255. "Cependant, l'évolution qui se poursuit dans l'humanité a pris une autre allure. Elle ne procède plus par bonds essentiels. Nous nous trouvons désormais sur un plan spirituel où la plasticité est infiniment plus grande à l'intérieur d'un même degré essentiel. Il s'échelonne ici un genre tout nouveau de hiérarchisation, plus profond, tout en n'étant plus essentiel. À son stade infrahumain le monde ne pouvait s'enrichir et se hiérarchiser que grâce à des ruptures d'équilibre essentielles, grâce à des mouvements violents" (*Le Cosmos*, 22-23).

culture. He will speak more of the continuation of evolution in humanity in the philosophical section.

5. Conclusion

De Koninck concludes the section on the scientific point of view by observing that the more scientists learn about cosmic and biological history, the clearer it becomes that there is direction and purpose in nature. He does not reserve the term evolution for biological development, but speaks of a movement of ascension from the first moment of cosmic history. De Koninck sees the same dynamic of sacrifice in the explosion of the primal mass from its first moment of extreme concentration, as in the assumption of the inorganic into life, and in the generation of mutated offspring. In each case the lower is impoverished that the higher might be enriched. “The inorganic universe is assumed into life by sacrificing itself to it.”⁶⁴ He rejects natural selection as a sufficient explanation for the evolution of species and suggests a law of mutations. He postulates that organisms have a natural tendency to mutate as they have a tendency to nourish themselves or reproduce because nature intends life to ascend.

De Koninck explains that the theory of evolution allows us to see the place of man in nature. I will end with a paragraph that was already cited in part.

Science, while being only a flat projection of what has relief and depth, enables us to glimpse the immense effort and the prodigious cost nature invests in the preparation for the coming of man. And whether he knows it or not, everything that happens in the world is done for him. The scale of natural species is only a scale of assault. If man is the *ultimum in executione*, he is nonetheless the *primum in intentione*. The all too poor account that we have given enables us to suspect the richness of the human being who contains virtually all the degrees of perfection of that which is below him... We will only be able to understand ourselves when we understand the universe. Our present is filled with our past.

The more profoundly we understand the world, the better we comprehend that we touch it only with the feet, and that with our head we touch the bottom rungs of another hierarchy of which nature is only a fleeting shadow.⁶⁵

⁶⁴ *The Cosmos*, 242. “On dirait que l’ univers inorganique est assumé dans la vie en se sacrifiant à elle” (*Le Cosmos*, 10).

⁶⁵ *The Cosmos*, 256. “La science, tout en n’étant qu’une projection plane de ce qui a relief et profondeur, nous laisse déjà entrevoir l’immense effort et les dépenses prodigieuses que fait la nature en

Although he is the last to appear, De Koninck tells us, man was the first in intention because all the activity of the cosmos from the first moment of the primal atom was directed towards the development of man. The vast stretches of the universe, the condensation of the nebulae and stars, the separation and cooling of the planets, the slow development from the first amoeba-like organism to mammal is all for the sake of man. His dignity is incomparably greater than the stars, but one can only understand man's dignity when one understands his place in the universe and in cosmic history. Then one understands that man is not only the culmination of cosmic history and the top rung of the hierarchy in nature but also the lowest rung of a spiritual hierarchy of which nature is only a shadow.

The reference to the spiritual hierarchy is already passing beyond the empirical science that De Koninck refers to in most of this section. The last sentence of the citation is De Koninck's transition to the section on the philosophical point of view. In the next two chapters, I will summarize and comment on the section of *The Cosmos* that looks at evolution from a philosophical point of view.

préparation de l'avènement de l'homme. Et qu'il le sache ou non, tout ce qui se fait dans le monde se fait pour lui. L'échelle des espèces naturelles n'est qu'une échelle d'assaut. Si l'homme est l'*ultimum in executione*, il n'en est pas moins le *primum in intentione*. L'image trop pauvre que nous avons tracée nous laisse soupçonner la richesse de l'être humain qui contient virtuellement tous les degrés de perfection de tout ce qui est inférieur à lui... Nous ne savons faire le tour de nous-mêmes que dans la mesure où nous savons faire le tour de l'univers. Notre présent est gonflé de tout le passé.

Et plus nous saisissons profondément le monde, mieux nous comprenons que nous ne le touchons que des pieds, que par le cr. ne nous touchons les derniers échelons d'une autre hiérarchie dont la nature n'est qu'une ombre fuyante" (*Le Cosmos*, 25).

CHAPTER TWO:

THE PHILOSOPHICAL POINT OF VIEW:

THE ONTOLOGICAL MECHANISM

In Chapter Two of *The Cosmos*, “The Philosophical Point of View,” De Koninck attempts to bridge the gap between experimental science and natural philosophy.¹ He begins by considering what he calls “preliminary notions,”² such as nature, motion, species, space and time.³ Then he tries to relate the data about evolution to these first known common notions. In a much later article on the unity of the sciences, he gives an example of why this is important.

There is no doubt that we must examine first of all the things we first name, and these are vague generalities. They are in a sense, the most important, and to neglect them will eventually spell disaster. The doctrine of prime matter, for instance, is essential to save the unity of the human individual. For if we held that a man is no more than an accidental superstructure made up of electrical charges, a human person would be no more of an individual than an individual pile of bricks.⁴

Unless one connects scientific knowledge to our first common notions of being, one is left with a scientific model unrelated to reality as we actually experience it in daily life. We experience ourselves and other humans as persons who can say “I” meaning this one substance who can see and think, not an accidental heap. To preserve this understanding of substance, one needs to understand the notions of matter and form. But it is not enough to come to knowledge of these “vague generalities,” however sophisticated be our philosophic development of them. They need to be filled with living knowledge of the concrete details of nature. “Why should the mind

¹ *The Cosmos*, 257-263.

² *The Cosmos*, 257. “Notions préliminaires” (*Le Cosmos*, 26).

³ *The Cosmos*, 257-263.

⁴ Charles De Koninck, “The Unity and Diversity of Natural Science” in *The Philosophy of Physics*, ed. by Vincent E. Smith, 5-24. Vol. 2 St. John’s University Studies, Philosophical Series (New York: St. John’s University Press, 1961), 16.

interrogating nature rest in vague generalities, no matter how important and how certain these may be? Is there anything unworthy about investigating man's organic constitution, or the activities of slug worms?"⁵ Ideally a philosopher of nature should accumulate broad empirical knowledge of nature in order to understand it as it actually exists in the concrete contingent world around us. The explosion of scientific knowledge makes this more and more difficult. However, De Koninck tried to inform himself of the latest findings of science in order to understand nature both as broadly and as concretely as possible.

One can helpfully divide Chapter Two into two major parts. In the first part, sections one through eleven, De Koninck writes about "the ontological mechanism of evolution."⁶ In the second part, sections twelve through fourteen, he writes about the goals of evolution "in the perspective of cosmic thought,"⁷ cosmic love,⁸ and cosmic unity.⁹

In the first "ontological mechanism" part of Chapter 2, De Koninck unfolds a philosophical understanding of evolution. De Koninck contrasts ontological with the "experimental point of view,"¹⁰ or "metric aspect."¹¹ Ontological refers to being. By "ontological mechanism," De Koninck means the causal chain of beings in evolution. He wishes to discover the deepest and most universal causes for the generation, being, and activities of natural things as they participate in the evolution of the cosmos. He seeks to explain: (1) how evolution is possible, i.e., how lower beings can bring forth higher beings without violating the principle "Nothing can cause (or give) what it does not have;" (2) how evolution is natural; and (3) how God and nature can both be causes of evolution.

⁵ "The Unity and Diversity of Natural Science," 16-17.

⁶ De Koninck gives us a hint of this division when he says in the second paragraph of section 12, "Having studied the ontological mechanism of evolution, let us now consider this same process in the formal perspective of cosmic thought." *The Cosmos*, 295. "Ayant étudié le mécanisme ontologique de l'évolution, considérons maintenant ce même processus dans la perspective formelle de la pensée cosmique." (*Le Cosmos*, 86).

⁷ *The Cosmos*, 295. "dans la perspective formelle de la pensée cosmique" (*Le Cosmos*, 86).

⁸ *The Cosmos*, 305. "Le désir cosmique comme élan vers l'amour consubstantiel et la liberté" (*Le Cosmos*, 98).

⁹ *The Cosmos*, 314. "L'unité du Cosmos" (*Le Cosmos*, 109).

¹⁰ *The Cosmos*, 274. "le point de vue expérimental" (*Le Cosmos*, 49).

¹¹ *The Cosmos*, 255. "l'aspect métrique" (*Le Cosmos*, 24).

The part of Chapter Two that I have named “The Ontological Mechanism” is divided into eleven sections.

The first three sections lay the philosophical groundwork. In the first section, De Koninck defines certain preliminary notions like nature and generation. In the second section, he presents an argument that mobile beings must be composed of two principles: matter and form. In the third section, he posits six philosophical theses that follow from his understanding of these terms and the hylomorphic nature of mobile being. These theses are important components of his theory of evolution. His challenge is to develop a theory that is in agreement with both these theses and the scientific data.

In section four, De Koninck makes three arguments that the cosmos is ordered to the human form: from the nature of mobile being, prime matter, and substantial form. Their being is essentially *useful* and for that reason *useless* unless ordered to something valuable in itself. It is a first treatment of final causality in evolution. In section five, De Koninck argues again that man is the *raison d’être* of the cosmos; this time he starts from nature as an intrinsic principle of motion. Then he answers the vexatious question of how nature in an individual can aim at generating something of another higher nature.

In the sixth section, De Koninck discusses inorganic being and the leap from non-living to living beings. The key to his argument is a comparison of the passive nature of the inorganic to the active self-movement of the organic.

The seventh section investigates organic being and the principle of life, the soul. The eighth section explains how the body is disposed for the soul in generation. In section nine, De Koninck argues that the same spiritual pressure that causes motion of inorganic beings is responsible for both biogenesis and the leaps from lower living beings to higher. It also contains an important aside about the liberality of nature. Subhuman species are desired for their own diversity and beauty as well as for the sake of the evolution of man.

The tenth section analyzes the greatest leap, from beast to man. De Koninck distinguishes between the immediate and the ultimate disposition of the body to the human soul. De Koninck uses his discussion of the immediate disposition of the body to compare St. Thomas's treatment of the "evolution of the human embryo"¹² to cosmic evolution. De Koninck asks what animal directly preceded man and what kind of causal connection there was between them. He asks whether a non-human can produce a human or a human body. De Koninck ends with a profound discussion of the final act in the ascendant movement of evolution, the infusion of the human soul by the Creator.

In the eleventh section, De Koninck gives a brief discussion of controversies over evolution and the relationship between philosophic knowledge and experimental science.

After this brief outline of the sections in *The Ontological Mechanism*, I will now summarize De Koninck's most important arguments in more detail. However, I will reorder the material slightly and use my own divisions in order to focus on particular questions. I will divide my discussion into five major parts: (1) Philosophical Groundwork (drawing from De Koninck's sections one, two, and three); (2) Man: The *raison d'être* of the Cosmos (drawing from De Koninck's sections four and five); (3) How Can Something Higher Come From Something Lower? (drawing from De Koninck's sections six through eleven); (4) Why is Evolution Natural? (drawing from the whole chapter); (5) Conclusion.

1. Philosophical Groundwork

De Koninck presents a summary of Aristotle's philosophy of nature from the *Physics* and *Metaphysics* in his first three sections to provide the basis for his speculation on evolution.

¹² *The Cosmos*, 289. "l'évolution de l'embryon humain" (*Le Cosmos*, 76).

A. Nature and Becoming

De Koninck writes about nature in two senses in *The Cosmos*. He speaks of “universal nature”¹³ as well as of nature as an intrinsic principle of cosmic beings. One of the objects of his theory is to work out the relationship between universal nature and individual natures.

Here De Koninck defines “nature taken in a general sense” or universal nature, as he later calls it, as “the co-ordinated ensemble of spatio-temporal things which surround us and of which we are a part.”¹⁴ It is the material universe we live in and know so well, but is it something one? Is this ensemble anything more than a random collection of bodies? In what sense is it a co-ordinated ensemble? As well as being an argument for evolution, *The Cosmos* is an argument for a physical universe, an ensemble that forms a united meaningful whole that is a part of the greater universe of all creation.

B. Time

What is the defining characteristic of the members of this whole, according to De Koninck? All of the things around us are constantly changing or becoming. Even things like rocks, which seem to stay the same for long periods of time, can only continue to exist by receiving their existence successively. De Koninck defines time as “successive and continuous duration.”¹⁵ If time were not continuous, then natural beings could only exist in fits and starts. Yet time must also be successive because natural things have a present that is only theirs for an instant, and then becomes the past. It is clear that the existence of natural beings must be “constantly renewed,”¹⁶ since their future does not yet exist and may never do so.

Natural beings change in many other ways besides becoming older. They grow, change color, or move from place to place, all of which take time. Nevertheless, the other sorts of changes are

¹³ *The Cosmos*, 283. “la nature universelle” (*Le Cosmos*, 66).

¹⁴ *The Cosmos*, 257. “l’ensemble coordonné des êtres spatio-temporels qui nous entourent et auxquels nous sommes mêlés” (*Le Cosmos*, 26).

¹⁵ *The Cosmos*, 257. “Durée successive et continue” (*Le Cosmos*, 26).

¹⁶ *The Cosmos*, 257. “toujours innovée” (*Le Cosmos*, 26).

not particular instances of time. Hence time is not equivalent to change but a particular aspect of it; it is a measure of change. Thus Aristotle defines time as “the measure of motion and of being moved.”¹⁷ Driving from Salzburg to Rome takes thirteen hours; boiling an egg takes four minutes. Aristotle explains that one measures motion by applying another motion as a unit to it as one measures length by applying the length of a meter stick to it.¹⁸ De Koninck therefore defines natural beings as mobile beings. He redefines nature as the ensemble of mobile beings rather than of spatiotemporal things since change is more fundamental than time.

C. Generation and Corruption

Mobile beings are always changing or becoming because they receive their existence successively. Their successive existence, De Koninck argues, comes from their complex essence.¹⁹ Neither a rock nor a tree possesses its existence tomorrow; therefore it can be different tomorrow or even not exist at all. Thus the puppy grows or dies; the child learns mathematics or forgets it. Mobile beings are always becoming more or less perfect. When one being is perfected, another is being destroyed. The cow grows by eating grass. The cow is perfected, but the grass is destroyed. Thus there are not only accidental changes, like growing and learning, but also substantial changes that involve the generation or corruption of a new substance. When a new substance is generated, the former substance corrupts.

De Koninck sees a rhythm in nature of giving and receiving, of one becoming poor that another may become rich.²⁰ “The capital of nature is limited. When one being is *enriched*, another

¹⁷ Aristotle, *Physics* IV.11 (221a1) and Thomas Aquinas, *In libros Physicorum* (Lectio 20 n.2)

¹⁸ For example, when we measure a motion by the hours it takes, we are applying one twenty-fourth of the rotation of the earth as a unit. See discussion in Aristotle, *Physics* IV.11 and 12 (219a22-221a7) and Thomas Aquinas, *In libros Physicorum* (Lectio 20 n.2.)

¹⁹ An argument for this will be given later in this chapter in Section F. Matter and Form.

²⁰ Pascal Ide points to the vocabulary of rich and poor in *The Cosmos* as an indication that De Koninck is writing a cosmology of love; see his “La Philosophie de la Nature de Charles De Koninck,” *Laval Théologique et Philosophique*, 66, 3 (Octobre 2010): 486-489. I am indebted to him for drawing my attention to this vocabulary of rich and poor.

is *impoverished*.”²¹ De Koninck sees evolution as a process of many generations and corruptions that gradually conquers the dispersion of time in the ensemble of nature, by leading to the production of a form that cannot be corrupted.

D. Individual and Species

The ensemble of nature contains many individual substances, but according to De Koninck, they can all be divided into four species.²² These four overarching natural species form a hierarchy of perfection. Plants are more perfect than elements and other non-living beings; animals are more perfect than plants; man is more perfect than beasts. Plants add nourishment, growth, and reproduction to bodily existence; animals add sensation and desire to the vegetative activities of plants; and humans add rationality to the sensitive and vegetative activities of animals. Between each rung of the ladder there is a clear step: life or no life; sensation or no sensation; reason or no reason. There are essential differences between these species, admitting of no intermediaries.

The four species also contain characteristics in common. They are all bodies. Plants, animals, and humans are all living. Animals and humans are both sensitive. The definition of each species contains both the proximate genus and the specific difference. Man is a rational animal. Although man is rational, sensitive, vegetative, and corporeal he is not composed of four beings; he does not contain four essences. The same human essence is at once rational, sensitive, vegetative, and corporeal. There is “only a virtual distinction”²³ between the different degrees of the essence. They are different powers of the same soul.

This much of De Koninck’s doctrine about four hierarchically ordered natural species accords well with observation and with St. Thomas. Biologists, today, prefer to classify organisms into five or six kingdoms, but if plant is taken to mean *organism without sensation* and animal to

²¹ *The Cosmos*, 258; emphasis added. “Le capital de la nature est limité. Quand un être s’enrichit, un autre s’appauvrit” (*Le Cosmos*, 27).

²² *The Cosmos*, 258.

²³ *The Cosmos*, 259. “Il n’existe qu’une distinction virtuelle” (*Le Cosmos*, 28).

mean *organism with sensation*, then all natural bodies do fall into one of the four species, even if it is not always easy to tell into which species certain bodies, like viruses or amoebas, fall.

More controversial is De Koninck's assertion that these four species are the *only* philosophically definable species. All the individuals within each of these species do not differ essentially. De Koninck says, "Two men are essentially equal, as are two animals and two plants."²⁴ They are opposed in a "homogeneous fashion"²⁵ whereas animal and man or plant and animal are opposed in a "heterogeneous way."²⁶ This is a surprising claim. Two elephants may be equal, but is an elephant essentially equal to an earthworm? Is an oak tree essentially equal to a one-celled diatom? De Koninck seems to say so. However, I believe he needs to be taken very formally. He says, "These four species are the only ones *philosophically definable*. The canine species is not a species in the *philosophical sense*."²⁷ Two animals or two plants are *homogenous* in the very precise sense that they belong to the same genus, either the plant or animal genus.

While biological evolution is a motive for seeing living kinds as fluid, De Koninck also writes that non-living kinds like gold, silver, and water are not philosophically definable species. De Koninck not only says that inorganic bodies all belong to the same species, but later he writes that they may even be all part of one substance. "I see nothing more unfitting in an inorganic world, substantially one in which innumerable living things vegetate, than in one tree on which insects munch the same leaves."²⁸ He does not deny that there are many inorganic substances, but only that he cannot be sure where they are. "I know of no criterion that would show the

²⁴ *The Cosmos*, 259. "Deux hommes sont essentiellement égaux, de même deux animaux ou deux plantes" (*Le Cosmos*, 28).

²⁵ *The Cosmos*, 259. "une façon *homogène*" (*Le Cosmos*, 28).

²⁶ *The Cosmos*, 259. "une façon *hétérogène*." (*Le Cosmos*, 28).

²⁷ *The Cosmos*, 258. "Ces quatre espèces sont les seules qui soient philosophiquement définissables. L'espèce canine n'est pas une espèce au sens philosophique" (*Le Cosmos*, 27).

²⁸ *The Cosmos*, 272. "je ne vois pas plus d'inconvénient à un monde inorganique substantiellement un et sur lequel végètent les innombrables vivants, qu'à un même arbre peuplé d'insectes rongant les mêmes feuilles" (*Le Cosmos*, 46).

ontological cuts in the inorganic world.”²⁹ He points out that spatial separation would not be sufficient to show us the ontological units of inorganic matter.

One might think that De Koninck saves himself from needing an extracosmic explanation for any leaps within the plant species or within the animal species by maintaining that there are no philosophically defined species within plant or animal kind, but such is not the case. This consideration makes *nothing* easier on the explanatory level for De Koninck. He holds it for independent metaphysical reasons. He argues that in *any* generation when the offspring possess higher powers than the generators there is equivocal generation.

Some scholastic authors have held that biological species at the interior of the same philosophical species, defined according to their degree of organization, differ only accidentally. And that within one philosophical species inferior biological species produce higher species.

This accidental difference is an extremely ambiguous thing. Must not the gradualities of the accidental order be reduced to the substance of which the accidents are a function? Let us not be misled by a conclusion of the scientific point of view with the ontological, with which we are now dealing. The generator must be the principal cause of the *whole* effect with all its determinate powers.³⁰

De Koninck insists by “the principle of sufficient causality,”³¹ that in univocal generation, the parents are responsible for *all* the powers of the offspring. If the offspring have higher powers, then the parents cannot be responsible for those higher powers. Since powers flow from

²⁹ *The Cosmos*, 272. “Je ne connais aucun critère décelant des coupures ontologiques dans le monde inorganique” (*Le Cosmos*, 46). It seems probable that there are many inorganic substances with different substantial forms. A strong argument can be made that they are at the molecular and atomic level so an atom of hydrogen would have a hydrogen substantial form; an atom of oxygen would have an oxygen substantial form. Different elements seem to be substantially different. Lead and gold look, feel, and act differently. When oxygen and hydrogen unite to form water, the atoms would undergo substantial change and become parts of a new substance, a molecule of water with a new substantial form. The disadvantage to placing the ontological cuts at the molecular or atomic or even subatomic level is that one loses the common sense understanding of primary substance as something one can point to and touch like “this rock, which I am holding.”

³⁰ *The Cosmos*, 263; emphasis by author. “Certains auteurs scolastiques ont prétendu que les espèces biologiques à l’intérieur d’une même espèce philosophique, définies d’après leur degré d’organisation, ne sont différentes que de manière accidentelle. Et qu’à l’intérieur d’une espèce philosophique les espèces biologiques inférieures peuvent produire des espèces supérieures.

“Cette différence accidentelle est chose extrêmement ambiguë. Ne faut-il pas réduire les gradualités d’ordre accidentel à la substance dont les accidents sont fonction? Ne soyons pas dupes d’une confusion du point de vue scientifique de ce problème avec le point de vue ontologique auquel nous nous sommes placés. Or le générateur doit être cause principale de *tout* l’effet avec toutes ses puissances déterminées” (*Le Cosmos*, 33-34).

³¹ See *The Cosmos*, 263; “Le principe de causalité suffisante” (*Le Cosmos*, 33).

substantial forms, if the progeny have higher powers than the parents then they must have higher substantial forms. Therefore the progenitors in evolutionary generations do not have the substantial form that the offspring receive; they are not communicating their form but being used as instruments. They do not communicate the substantial form.

De Koninck's grounds for proposing only four philosophically definable species are threefold: 1. Subspecies, according to his theory, like elephant and giraffe or gold and silver are not definable; they do not, as far as we can see, have *opposed* differences like sensitive/insensitive. 2. Not only do they not have opposed differences; their differences from one another are more *like* a collection of accidents than a specific difference.³² Subspecies like elephant and cockroach lack sufficient formal determination to be called philosophically definable species. Yet, this statement does not identify the differences between subspecies with accidental differences. 3. What biological subspecies actually developed depended on many contingent factors like chance weather conditions, radiation emissions, and the meeting and mating of certain animals. The results are *kinds* in a very deficient way; other species might have developed with other forms and powers or degrees of power.

One might gather the impression from De Koninck's way of speaking that differences between subspecies are simply too small to be essential differences. For example, he says that the difference between any two angels is much bigger than the differences between even what he does grant as philosophically knowable species such as inorganic and human.³³ On the other hand, he does still apply the term "subspecies" to them, which indicates some sort of formal difference in essence.

According to some interpreters, De Koninck holds that the four philosophically definable species of material substance are the only four species in nature, simply speaking, and that all

³² Lawrence Dewan comments on De Koninck's view of subhuman forms, "What interests me most in De Koninck's study is the conception of the forms and essences of material things. He presents a view of these 'absolutes' as being very weak absolutes." "The Importance of Substance," *Form and Being* (Washington, D.C.: Catholic University of America Press, 2006), 121.

³³ *The Cosmos*, 320.

other differences are merely accidental.³⁴ This reading does not do justice to the texts. In fact, De Koninck holds that “species” is an analogical term and that “sub-species” involve essential differences. In an article written a year after *The Cosmos*, “Reflections on the Problem of Indeterminism,” he says that the four natural species are “*quasi-genera* with respect to sub-species,”³⁵. In the same paper, he explains more about the lack of necessity (and hence intelligibility) of subhuman species.

The infra-human cosmic species are not absolutely certain with regard to their structures, nor true *a priori*. Each *species* is new in its structure. Once established, it constitutes a determined point of departure for other species in which the determination of their strain will be in a certain fashion prolonged: this determination has opened the world to *essential structures* that could not possibly have been determinately possible without it.³⁶

He speaks of the *species*’ lack of certitude in their “*essential structures*.” Thus he speaks both of species and of essence with regard to what he calls subspecies in *The Cosmos*. This shows that he wishes to maintain some formal essential differences between the sub-species. Likewise, when he says, “the generator must be the principal cause of the whole effect with all its determinate powers,”³⁷ he implies that the mutated offspring have higher powers, which must mean a formal difference, even if it is only in the *degree* of sensitive power rather than a wholly new power, like rationality. Clearly De Koninck wishes to emphasize the contingency of the coming to be of the particular living subspecies, as he calls them, which actually evolved and their lack of essential determination in comparison to spirits.

³⁴ Mark Ryland, “Applying Natural Philosophy to a Modern Controversy: The Surprisingly Difficult Case of Darwinism, Transformism, and Intelligent Design” (Paper presented at the annual meeting of the American Maritain Association, November 2, 2006): 44.

³⁵ “Reflections,” 409. “*quasi-généra* par rapport aux sous-espèces” (“Réflexions,” 234).

³⁶ “Reflections,” 423. “Les espèces cosmiques infrahumaines ne sont pas absolument certaines quant à leur structure, ni vrais *a priori*. Chaque espèce est nouvelle dans sa structure. Une fois établie, elle constitue un point de départ déterminé pour d’autres espèces dans lesquelles la détermination de leur souche sera d’une certaine façon prolongée: cette détermination a ouvert le monde à des structures essentielles qui n’eussent pas été déterminément possibles sans elle.” (“Réflexions,” 252).

³⁷ *The Cosmos*, 263. “Le générateur doit être cause principale de tout l’effet avec toutes ses puissances déterminées” (*Le Cosmos*, 34).

E. Space

De Koninck first defined universal nature as “the coordinated ensemble of spatiotemporal things which surround us and of which we are a part.”³⁸ He has defined time and now he will define space. De Koninck uses the opposition between individuals of the same kind to define *space* in a novel way. He says that *space* is the “homogeneous exteriority constituted by homogeneous opposition.”³⁹ By this, De Koninck means that space does not exist before natural beings; there is no empty container in which bodies can move. The opposition between natural beings brings into being what we think of as space. Any and all homogeneous opposition in the material order causes spatial exteriority, whereas heterogeneous opposition does not constitute space.

Beings are not only *in* space: space arises from their opposition. In a universe where there is only pure heterogeneity there is no space. These beings would be specifically opposed outside of any *natural* common genus.⁴⁰

Thus, according to De Koninck, an animal and a man will be spatially exterior to each other because they are both animals. Likewise a plant and an animal will be spatially separated because they are both living bodies. Whenever natural beings share a common genus, they will be spatially exterior to each other. Where beings are only opposed in a heterogeneous way with no common genus, there is no space.

This doctrine of De Koninck needs to be deepened by further considerations. It seems that the homogeneous opposition that grounds space is rooted in being a body, the most common natural genus. What is it about body that allows there to exist two bodies of the same species?

Whenever one encounters a multiplicity of equal determinations from the point of view of determination one must necessarily have recourse to a principle of opposition in the essential order, a principle distinct from that which renders essences real from the point of view of

³⁸ *The Cosmos*, 257. “L’ensemble coordonné des êtres spatio-temporels qui nous entourent et auxquels nous sommes mêlés” (*Le Cosmos*, 26).

³⁹ *The Cosmos*, 259. “Nous appelons espace l’extériorité homogène constituée par l’opposition homogène” (*Le Cosmos*, 28).

⁴⁰ *The Cosmos*, 259. “Les êtres ne sont donc *dans* l’espace: l’espace naît de leur opposition. Dans un univers où il n’y a qu’hétérogénéité pure il n’y a pas d’espace. Ces êtres seraient spécifiquement opposés en dehors de tout genre *naturel* commun” (*Le Cosmos*, 28).

determination.⁴¹

This is an argument for the hylomorphic composition of bodies. The principle of indetermination or potentiality is called matter; while the principle of determination is called form. It is the principle of potentiality, which makes it possible that there can exist more than one individual with the same essential determination. The potentiality of matter is not exhausted by one form; it can receive many instances of the same form like dough being used to make many cookies. Forms are determinate and differ from each other; it is the lack of determination, the openness to form on the side of matter from which the possibility of homogeneity comes. For example, a cookie cutter can only have one shape; but there can be many cookies with the same shape, because the shape can be multiplied in dough. Therefore, since bodies can belong to the same species, they must be composed of a principle of indetermination, matter, and a principle of essential determination, form. Matter, the principle that allows homogeneity, is the principle, which is the foundation of spatial exteriority.⁴²

This is a counter proposal to the contemporary understanding of space as an actually existent empty container, or the Kantian proposal that space is a mode of human thought. De Koninck does not provide here an exhaustive treatment of space, but this summary account helps to specify his understanding of “universal nature.”

F. Matter and Form

De Koninck gives another argument for the hylomorphic nature of bodies from the mobility of natural beings. Natural or mobile beings, De Koninck explains, are beings that change. Even things like rocks, which seem to stay the same for long periods of time, can only continue to exist by receiving their existence successively. At any moment, they could be changed. “Apparently, a

⁴¹ *The Cosmos*, 261. “Partout où l’on rencontre un multiple de déterminations égales au point de vue détermination, on doit nécessairement avoir recours à un principe d’opposition d’ordre essentiel, principe distinct de ce qui rend égales au point de vue détermination les essences” (*Le Cosmos*, 30).

⁴² For another analysis of space and three dimensionality by a Thomistic philosopher, see Joseph Bobik, *Aquinas on Matter and the Elements: A Translation and Interpretation of the De Principiis Naturae and the De Mixtione Elementorum of St. Thomas Aquinas* (Notre Dame, Indiana: University of Notre Dame Press, 2006), 159-161.

mobile being is a contradictory being. In order to be, it must be successively other. But if it is always other, how can it be what it is?”⁴³ Mobile beings must have one principle that allows the being to keep the same identity, while a second principle allows the being to receive existence consecutively. But how could two principles make one essence? If both principles were determinate actualities, they could only be united accidentally. Therefore one principle must be indeterminate, pure receptivity, while the other is a principle of determination that causes the identity of the mobile being. The indeterminate element is what allows for receptivity to consecutive existence. De Koninck ends this section with the conclusion that all natural beings are composed of an indeterminate or potential principle, *prime matter*, and a principle of determination, or *form*. He uses these terms with the very precise meanings that St. Thomas gave to them.

Mobile beings exist continuously and successively because of their complex essence. They exist continuously because of their *form*, which stays the same, and successively because of *matter*, which as pure receptivity needs to receive existence successively. “The mobile, essentially unachieved, must pursue its existence and it is in this perspective, indefinitely separated from itself.”⁴⁴ Natural beings are separated from themselves because they cannot possess their past, present and future at the same time. They pursue their future, while always losing their present as it becomes past.

G. Philosophical Principles Useful for Understanding Evolution

De Koninck explains six philosophical principles that will be used in his explanation of the ontological mechanism of evolution.

⁴³ *The Cosmos*, 259. “Apparemment, un être mobile est un être contradictoire. Il doit être, pour être, successivement autre. Mais s’il est toujours Autre, comment peut-il être ce qu’il est?” (*Le Cosmos*, 29).

⁴⁴ *Cosmos*, 261. “Le mobile, essentiellement inachevé, doit poursuivre son existence, et il est dans cette perspective, indéfiniment séparé de lui-même” (*Le Cosmos*, 31).

1. “Prime matter insofar as it is pure indetermination unites all material beings in the same matrix which is common to them.”⁴⁵ There can exist only one pure potency since multiple potencies would have to differ by some determination, but prime matter is absolutely without any determination. Matter cannot subsist alone without form, since it has no determination of its own. Matter could only come into existence in a composite. All such composites are united in the matrix of prime matter.

2. “Prime matter is not a kind of reservoir containing in a latent state determined forms which only await a chance to be released.”⁴⁶ De Koninck wants to eliminate the idea that prime matter is like a tank of all possible corporeal forms waiting to be caught by the appropriate agent. Prime matter has no hidden forms in it. It is nothing but potency; it is nothing but the desire for forms.⁴⁷ The only way that forms are contained in matter is the way that various segments are contained in a line as possible cuts. Before the line is cut, any length is possible and no length more probable than another. Between any two actual cuts, there exists an infinity of possible cuts. De Koninck makes only an exception for the human form, which he will argue is the necessary fulfillment of prime matter.

The following is an example to explain De Koninck’s point. Before a sculptor makes a statue, any shape is possible. No shape is contained in the marble except as a possibility, a possibility that depends both on the marble and the sculptor. Arrowheads and ashtrays as well as *David* were

⁴⁵ *The Cosmos*, 262. “La matière première *en tant qu’indéterminé pur*, réunit tous les êtres matériels dans une même matrice qui leur est commune” (*Le Cosmos*, 32).

⁴⁶ *The Cosmos*, 262. “La matière première n’est pas une espèce de réservoir contenant à l’état latent des formes déterminées qui n’attendent que l’occasion de se déclencher” (*Le Cosmos*, 32).

⁴⁷ The notion that prime matter desires form comes from Aristotle. (IV.9 [192a19-24]). St. Thomas comments on it: “Sciendum est enim quod omne quod appetit aliquid, vel cognoscit ipsum et se ordinat in illud; vel tendit in ipsum ex ordinatione et directione alicuius cognoscentis, sicut sagitta tendit in determinatum signum ex directione et ordinatione sagittantis. Nihil est igitur aliud appetitus naturalis quam ordinatio aliquorum secundum propriam naturam in suum finem. Non solum autem aliquid ens in actu per virtutem activam ordinatur in suum finem, sed etiam materia secundum quod est in potentia; nam forma est finis materiae. Nihil igitur est aliud materiam appetere formam, quam eam ordinari ad formam ut potentia ad actum. Thomas Aquinas” (In libros Physicorum I lectio 15 no. 10.) Thomas explains that desire in matter is its order toward form or its affinity for form. It is not something active, not a movement but the principle of movement. It is called desire analogously because it is a principle of movement as desire is. Moreover, it is derived from the desire of the creator who places a real ordination to the end in natural things.

contained in the marble as possibilities. *David* was contained in the marble as a possibility only with the presence of the appropriate agent, Michelangelo.

For natural beings, then, there do not exist forms of structure determined apriori, with the exception no doubt of the form or forms given at the outset, and of the form which will realize the finality of nature as a whole. Moreover, existing forms are by definition determined. Yes, but in the manner of the cuts when a line is actually divided. These forms of existent beings are fixed like whole numbers. Between any two existing forms there is more than an infinity of others possible.⁴⁸

For De Koninck, then, the only cosmic forms determined from the beginning were the forms of the very first cosmic being or beings (perhaps the primal atom) and the form that is the goal of cosmic history, humanity. The possibilities which have become actualized and now exist, such as amethyst, oak tree, and elephant, are determinate now like actual segments, but there are an infinite number of other forms possible between any two of them that could have been actualized had different contingent events occurred in cosmic history.

3. “Generation is not therefore in any way a creation, but the act by which a given compound educes another from the potency of prime matter.”⁴⁹ Since prime matter was created in the beginning when the first composite being was created, every composite being is a created being depending directly on God. Nevertheless created beings can truly generate composite beings by acting to change the material dispositions in another composite. When the first being alters the second being sufficiently, it draws forth a new substantial form from the matter of the second composite.

It may be surprising that De Koninck uses the word *educe* rather than *communicate* for generation, although in univocal generation the generator does indeed possess the form and communicate it to the generated. He seems to be emphasizing that a natural form can only be

⁴⁸ *The Cosmos*, 262. “Pour les êtres naturels il n’existe donc pas de formes à structure déterminée *a priori*, à l’exception, sans doute de la forme ou des formes données à l’origine, et de la forme qui réalisera la finalité de la nature entière. Cependant, les formes existantes sont par définition même déterminées. Oui, mais à la manière des coupures données dans une ligne actuellement divisée. Ce sont les formes des êtres existants qui sont fixes comme les nombres entiers. Entre deux formes existantes quelconques il y en a en puissance une infinité d’autres possibles” (*Le Cosmos*, 32).

⁴⁹ *The Cosmos*, 262. “La génération n’est donc en aucune façon une création, mais l’acte dans lequel un composé donné en éduit un autre de la puissance de la matière première.” (*Le Cosmos*, 33).

communicated by physically altering that from which the new being is to be generated. An animal cannot spiritually transfer its form to a piece of matter. The final step of generation is completed only by the power of a more universal cause. No cosmic being is the complete cause of the form of its species.

4. “From the existence of the first composite...all possible natural forms were given in the potency of prime matter. Hence, no special creative act is necessary to educe or draw them from this potency, provided that there exists some sufficient created cause.”⁵⁰ De Koninck does not mean that natural forms have some actual although hidden existence from the beginning. That would contradict the second thesis that there is no reservoir of forms. They are “given in the potency of matter” simply because they are possible ways that matter can be formed. Therefore to generate a natural being is not to create it from nothing but to generate it from something, from matter that has always had this new form as a possibility and now is so disposed materially that it can actually receive the form. To return to our example, Michelangelo does not create *David* from nothing but from marble that already had the possibility within it of becoming *David*. Michelangelo is a “sufficient created cause” because he has the form of *David* in his mind and the skill or artistic power in his hands to draw forth the form from the marble. A “sufficient created cause” in nature will also have to have the form present in it, in some way, as well as the power to draw the form from the appropriate composite. So, for example, animals have the specific form and the generative power to form matter into the male and female germ cells from which their offspring will develop when united.

(5) “The principle of sufficient causality requires that the cause in question be at least at the level of the effect to be produced.”⁵¹ By this principle, De Koninck rejects spontaneous

⁵⁰ *The Cosmos*, 262-263. “dès l’existence du premier composé... toutes les formes naturelles possibles étaient *données* dans la puissance de la matière première. Dès lors, aucun acte créateur spécial n’est nécessaire à les éduire de cette puissance, pourvu qu’il existe une cause créée quelconque suffisante” (*Le Cosmos*, 33).

⁵¹ *The Cosmos*, 263. “Le principe de causalité suffisante exige que la cause en question soit au moins du niveau de l’effet à produire” (*Le Cosmos*, 33).

generation as the principal cause of life. No non-living thing could generate a living thing as a principal cause; no plant could generate an animal as a principal cause. Nothing can give a perfection that it does not possess. This holds not only for essential perfections like life or sentience but also for accidental perfections. “The generator must be the principal cause of the whole effect with all its determinate powers.”⁵² Therefore, even within a broad philosophical species, like plant or animal, the parents cannot generate offspring that have higher powers. De Koninck does leave open the possibility of something lower being the instrumental cause of something higher. Instrumental causality is a crucial feature of his account of evolution.

(6) “Form is matter’s reason for being; potency is essentially ordered to act.”⁵³ Matter is not indifferent to form. It is “*desire* for form.”⁵⁴ De Koninck refers to the *de potentia* of St. Thomas to defend his use of desire. “The *desire* for form is not some action of matter but a certain relation of matter to form according as it is in potency to it.”⁵⁵ St. Thomas uses *desire* analogously of matter to name its relation to form. He names the principle of the movement of desire by the name of the movement. Matter’s relation to form is like an animal’s appetite for food; matter has an affinity for form because it can be perfected by it.

2. Man: The *raison d’être* of the Cosmos

De Koninck begins his argument, after laying out these preliminary terms and principles. He asks what the cosmos is good for. Is it good in itself or for itself or is it good for something or someone else? In sections four and five, he argues in four ways that man is the *raison d’être* of the cosmos: from the nature of mobile being, of matter, of substantial forms, and of nature in the sense of intrinsic principle of motion. By *raison d’être*, De Koninck means the deepest reason for

⁵² *The Cosmos*, 263. “Or, le générateur doit être cause principale de tout l’effet avec toutes ses puissances déterminées” (*Le Cosmos*, 34).

⁵³ *The Cosmos*, 263. “La forme est la raison d’être de la matière: la puissance étant essentiellement ordre à l’acte” (*Le Cosmos*, 34).

⁵⁴ *The Cosmos*, 253. “désir de la forme” (*Le Cosmos*, 34).

⁵⁵ *de Potentia* 4.1 ad s.c.2: “...appetitus formae non est aliqua actio materiae sed quaedam habitudo materiae ad formam, secundum quod est in potentia ad ipsam.”

the being of the cosmos, namely the final cause or goal that God wished to accomplish in creating a material cosmos.

A. Argument from Mobile Being

De Koninck's first argument is from the nature of mobile being. Mobile beings have a history, explains De Koninck, because their existence is successive, never wholly possessed.

Mobile being pursues its existence, but it cannot continue to exist in order to have had a history. Its end cannot consist in the pursuit of an existence always infinitely removed, that is unrealizable. If mobile beings existed in order to exist, their reason for being would be impossible; their existence would even be contradictory.⁵⁶

No mobile being possesses its yesterday or its tomorrow; it may not even exist tomorrow. It cannot exist for the sake of its own existence because it is in principle unable to be achieved. Thus, De Koninck concludes, the goal of every mobile being must be something immobile, a being that does not have to pursue its existence but can actually realize it.

A being that is purely immobile, that does not have a successive existence at all, must be a spirit. Spirits are essentially "trans-cosmic," or outside of the cosmos.⁵⁷ The cosmos is of no use to spirits for three reasons. First, they are not drawn from prime matter but must be instantaneously created. Second, they need nothing from the cosmos like food or air to maintain their life. Third, they do not need to learn through sensing bodily things. But it is unfitting for the goal of the cosmos to be entirely outside of it.

The particular end of the cosmos ought to be interior to the cosmos. If mobile being as such cannot be that end since it is only a means, its reason for being is essentially utilitarian. But its existence cannot be useful for a pure spirit. That is why a pure spirit cannot be the *raison d'être* of the

⁵⁶ *The Cosmos*, 263-264. "L'être mobile poursuit son existence. Mais il ne peut continuer d'exister afin d'avoir eu une histoire. Sa fin ne peut consister dans la poursuite d'une existence toujours infiniment éloignée c'est-à-dire irréalisable. Si les êtres mobiles existaient pour exister, leur raison d'être serait l'impossible: leur existence même serait contradictoire" (*Le Cosmos*, 34).

⁵⁷ *The Cosmos*, 264. "transcosmique" (*Le Cosmos*, 35). De Koninck would not hesitate to agree that spirits enter freely into cosmic history. God uses angels as messengers or instrumental powers in nature. Evil spirits are powerful causes of evil in human history. However, De Koninck says that angels do not need the cosmos.

cosmos.⁵⁸

If mobile beings are not for their own sake but only means or useful, then they must have an end to which they are useful. Since they cannot be of use to a pure spirit, a pure spirit cannot be the *raison d'être* of the cosmos. Therefore, according to De Koninck, the being that is the goal of the cosmos must be both immobile, i.e. spirit, and part of the cosmos, i.e. matter. The only being that answers to this description is man.

The being in which resides the end of the cosmos must be both immobile and cosmic; both spirit and matter must be found in it, its essence must be composed of a spiritual principle which integrates the cosmos. The essence of the being that is the terminal point of the whole of nature will be composed of a spiritual form and prime matter. Man is manifestly the *raison d'être* of the whole of nature.⁵⁹

Only something within the cosmos, a body, can benefit from the cosmos; but only an immobile being, a person, can be willed for its own sake. Man, the embodied spirit or the ensouled body is the goal of nature. Furthermore, only through humans can the cosmos be ordered to God because only humans can return to God, the origin of the cosmos, through knowledge and love. Thus all lower creatures exist to serve man. De Koninck quotes St. Thomas to explain this point.

Only rational created nature is immediately ordered to God; other [cosmic] creatures, in fact, do not attain the universal but only the particular; they participate in the goodness of God with respect to existence only, like inanimate beings, or with respect to life and knowledge of particulars, like plants and animals. Rational nature, however, inasmuch as it knows the universal form of the good and of being is ordered immediately to the universal principle of being.⁶⁰

De Koninck's point is that humans can understand universals, which are independent of any restriction due to matter. They can understand being *per se* and goodness *per se* and not only this being that is good to eat or this being that needs to be suckled. They are "capable of making a

⁵⁸ *The Cosmos*, 264. "Or, la fin particulière du cosmos doit être intérieure au cosmos. Si l'être mobile en tant que tel ne peut être fin, il n'est que moyen— sa raison d'être est essentiellement utilitaire. Or, son existence ne peut être utile à un esprit pur. Donc, l'esprit pur ne peut être sa raison d'être" (*Le Cosmos*, 35).

⁵⁹ *The Cosmos*, 264. "Donc, l'être en qui consiste la fin du cosmos doit être à la fois immobile et cosmique. Il faudra donc trouver en lui à la fois esprit et matière: il faut que son essence soit composée d'un principe spirituel, et d'un principe qui l'intègre dans le cosmos. L'essence de l'être point terminus de la nature entière, sera composée d'une forme spirituelle et de matière première. L'homme est manifestement la raison d'être de la nature entière" (*Le Cosmos*, 35).

⁶⁰ *ST II-II 2.3*: "Sola autem natura rationalis creata habet immediatum ordinem ad Deum. Quia ceterae creaturae non attingunt ad aliquid universale, sed solum ad aliquid particulare, participant divinum bonitatem vel in essendo tantum, sicut inanimata, vel etiam in vivendo et cognoscendo singularia, sicut plantae et animalia, natura autem rationalis, inquantum cognoscit universalem boni et entis rationem, habet immediatum ordinem ad universale essendi principium." Cited in *The Cosmos*, 264 ; *Le Cosmos*, 35.

tour of being [and therefore] can rejoin the source of being.”⁶¹ St. Thomas further explains the return of the cosmos to God through man in the following passage.

An effect is most perfect when it returns to its source; therefore the circle, among all figures, and the circular, among of all movements, are the most perfect, because a return is made to the beginning in them. Therefore, in order that the universe of creatures may attain its ultimate perfection, creatures must return to their principle. Now each and every creature returns to its principle, in so far as it bears a likeness to its principle, in its being and nature, whereby it has a certain perfection: even as all effects are most perfect when they are most like their efficient cause, as a house when it is most like art, and fire when it is most like its generator. Since then God’s intellect is the principle of the production of creatures it was necessary for the perfection of creatures that some creatures be intelligent.⁶²

Man returns the cosmos to God by his similarity to God; he is the only cosmic creature that is intellectual as God is.

Moreover, as St. Thomas writes, intellectual creatures complete the circle not only by having intelligence and will like their Creator, who made them by His intelligence and will, but even more so by the operations by which they attain Him in knowledge and love in beatitude.

It is necessary for the complete perfection of the universe that there should be some creatures which return to God not only by a likeness of nature, but also by their operation. This cannot be except by an act of the intellect and will; since not even God Himself has any other operation towards Himself than these. Therefore it was necessary for the greatest perfection of the universe that there should be some intellectual creatures.⁶³

Intellectual creatures not only return to God by being like Him in having intellect and will. They also return to Him by knowing and loving Him. God gives Himself to intellectual creatures as the object of their intellects and wills.⁶⁴

⁶¹ *The Cosmos*, 264. “capable de faire le tour de l’être, peut rejoindre la source de l’être” (*Le Cosmos*, 36).

⁶² *SCG II* 46.2: “Tunc enim effectus maxime perfectus est quando in suum redit principium: unde et circulus inter omnes figuras, et motus circularis inter omnes motus, est maxime perfectus, quia in eis ad principium reditur. Ad hoc igitur quod universum creaturarum ultimam perfectionem consequatur, oportet creaturas ad suum redire principium. Redeunt autem ad suum principium singulae et omnes creaturae inquantum sui principii similitudinem gerunt secundum suum esse et suam naturam, in quibus quandam perfectionem habent: sicut et omnes effectus tunc maxime perfecti sunt quando maxime simulantur causae agentis, ut domus quando maxime similatur arti, et ignis quando maxime similatur generanti. Cum igitur intellectus Dei creaturarum productionis principium sit, ut supra ostensum est, necesse fuit ad creaturarum perfectionem quod aliquae creaturae essent intelligentes.”

⁶³ *SCG II* 46.3: “Oportuit igitur, ad consummatam universi perfectionem, esse aliquas creaturas quae in Deum redirent non solum secundum naturae similitudinem, sed etiam per operationem. Quae quidem non potest esse nisi per actum intellectus et voluntatis: quia nec ipse Deus aliter erga seipsum operationem habet. Oportuit igitur, ad perfectionem optimam universi, esse aliquas creaturas intellectuales.”

⁶⁴ De Koninck’s conclusion that the cosmos must necessarily bring forth a rational animal strongly resembles some versions of the strong anthropic principle formulated by many contemporary physicists.

B. Argument from Matter

De Koninck's second argument that man is the *raison d'être* of the cosmos is from the nature of matter. Matter is ordered to mobile being since it is a principle of mobile being; it is the principle, which allows mobile being to change or be changed. But, as was just argued, mobile being itself must be ordered to an immobile being or its existence would be contradictory. Therefore matter must also be ordered to an immobile being. Matter's final cause cannot be mobile being as mobile because its being is indefinite. Nothing could come to be ultimately for the sake of an indefinite goal that can never be achieved. Matter must therefore be ordered to an immobile form. That immobile form is the human soul.⁶⁵

Every creature existing in potency can have no other tendency than to arrive at act by way of motion. So matter, in following its appetite, by preference tends toward such an act, if it is the most remote and perfect. Consequently, this natural appetite in virtue of which matter seeks form, should tend, as to the last end of generation, to the most remote and perfect act to which matter can attain.

There are several degrees in the acts of forms. Prime matter is right off in potency to elementary form; reduced to elementary form, it is in potency to the mixed form, because the elements are the matter resulting from a mixture, and are in potency to the vegetative form: for this soul is the form of a body of that nature; likewise, the vegetative soul is sensitive in potency, and the sensitive soul is intellectual in the same way.

This is proved by the process of generation; its product begins by being a fetus, which lives in the manner of plants; to this life succeeds that of the animal, and in the third place life proper to man. In the order of beings produced by way of generation and subject to corruption, there is no more remote or perfect form than this last. The human soul is thus the term of completed generation, and matter tends to arrive at this term which is its final form. Thus the elements exist for mixed bodies, and the latter for living bodies: among these, plants exist for animals, animals for man, and

Barrow and Tipler, among others, describe the great number of physical properties such as the size and age of the universe, the electron's mass, the proton's electric charge and Newton's gravitational constant that are all precisely what is needed for life. They explain that even a slight variation would have made the development of life impossible. Therefore they propose as a hypothesis the strong anthropic principle: "The Universe must have those properties which allow life to develop within it at some stage in its history." [Frank J. Barrow and John D. Tipler, *The Anthropic Cosmological Principle* (Oxford: Oxford University Press, 1988), 21]. The "must" is not just an acknowledgement of the fact that since there is life, there must be the conditions necessary for life. Rather the "must" is stating a necessary law. This can be seen in their more radical final anthropic principle: "Intelligent information-processing must come into existence in the Universe, and, once it comes into existence, it will never die out." (Barrow and Tipler, 23). These statements resemble the conclusions of De Koninck's argument that a material sensible cosmos makes no sense unless it is for the sake of beings that are both corporeal and rational and immortal, who can observe and appreciate the cosmos and bring it back to its creator in praise.

⁶⁵ The human soul is immobile in the sense of immortal; it has no principle of non-being within it. It can change since it can perform operations and acquire habits, but it cannot cease to be human.

*man is the end of generation in its entirety.*⁶⁶

If then it is true that the motion of the sky is ordered to the generation of beings, and that man is the term of this generation in its entirety, and as the final end of this genus, it is evident that the [proximate] end of the motion of the sky is ordered to man as to the final end in the genus of beings produced by generation and susceptible of being moved.⁶⁷

This passage is one of the most important texts from St. Thomas that De Koninck uses to show that evolution is compatible with St. Thomas's philosophical principles, even though St. Thomas himself did not develop a full-fledged evolutionary theory. However, this rich text needs to be unfolded.

According to St. Thomas, there is a hierarchy of natural forms: elements, mixed bodies [or compounds], plants, beasts, and humans. Each form contains the powers of the forms lower than it as well as an additional power or powers. The matter actualized by a lower form is, in each case, in potency to the next higher form and for this reason has a tendency or inclination toward the higher form.

Thus, there is not only a static ladder of ascending perfection of being but a tendency or inclination in each level of being toward a higher level of being. As St. Thomas says, "Consequently, this appetite in virtue of which matter seeks form, *should be borne* [fertur], as to the last end of generation, to the most remote and perfect act to which matter can attain."⁶⁸ And again, "The human soul is thus the term of completed generation, and matter *tends* [tendit] to

⁶⁶ SCG III 22.7: "Oportet quod intentio cuiuslibet in potentia existentis sit ut per motum tendat in actum. Quanto igitur aliquis actus est posterior et magis perfectus, tanto principalius in ipsum appetitus materiae fertur. In actibus autem formarum gradus quidam inveniuntur. Nam materia prima est in potentia primo ad formam elementi. Sub forma vero elementi existens est in potentia ad formam mixti: propter quod elementa sunt materia mixti. Sub forma autem mixti considerata, est in potentia ad animam vegetabilem: nam talis corporis anima actus est. Itemque anima vegetabilis est potentia ad sensitivam; sensitiva vero ad intellectivam. Quod processus generationis ostendit: primo enim in generatione est fetus vivens vita plantae, postmodum vero vita animalis, demum vero vita hominis. Post hanc autem formam non invenitur in generabilibus et corruptibilibus posterior forma et dignior. Ultimus igitur finis generationis totius est anima humana, et in hanc tendit materia sicut in ultimam formam. Sunt ergo elementa propter corpora mixta; haec vero propter viventia; in quibus plantae sunt propter animalia; animalia vero propter hominem. Homo igitur est finis totius generationis;" cited in *The Cosmos*, 265; *Le Cosmos* 37.

⁶⁷ SCG III 22.9: "Si igitur motio ipsius caeli ordinatur ad generationem; generatio autem tota ordinatur ad hominem sicut in ultimum finem huius generis: manifestum est quod finis motionis caeli ordinatur ad hominem sicut in ultimum finem in genere generabilium et mobilium." [Proximate] is added by De Koninck in his French translation of St. Thomas. Cited in *The Cosmos*, 265; *Le Cosmos* 37.

⁶⁸ SCG III 22.7: "Quanto igitur aliquis actus est posterior et magis perfectus, tanto principalius in ipsum appetitus materiae fertur;" cited in *The Cosmos*, 265; *Le Cosmos*, 37.

arrive at this term which is its final form.”⁶⁹ Although matter is potency or indetermination, St. Thomas says that matter is not quite empty of determination; it is desire for form but not equally for any and all forms that can be drawn from matter. It is like an empty vessel that can hold any cosmic form but only the human form perfectly fulfills it. Prime matter is principally a desire for the “most remote and perfect act to which matter can attain.” There is an impulse directing generation and corruption, such that when a body or bodies are prepared to receive a higher form, they will become the higher body rather than remain what they already are.

The potency of matter is not neutral like the potency of marble. Marble, as marble, has no more ordination toward the form of *David* or *Moses* than toward the form of an ashtray. It is only an extrinsic agent that desires and causes the marble to become *David*. It is only from the point of view of man, an external agent, that the form of *David* perfects marble more than the form of an ashtray. Matter, on the contrary, has the reverse of inertia with respect to substantial form. Things do not tend to remain what they are but to climb the rungs of the hierarchy of nature toward the form of man and there come to rest. The finality is not only in the external agent, God, who created matter for this end; it is also in matter. Prime matter could not attain the human form without God’s agency, since matter, as matter, does not move itself. However, unlike human artists, God is able to place finality within creatures as their nature. “And since nature means two things, the matter and the form,”⁷⁰ as Aristotle says, matter, too, is a source of being moved. Matter only exists in composites as formed matter, but it remains *unsatisfied* in every sub-rational being. Certainly, each corporeal form satisfies it partially, or it could not become one being with its form. There is a unity because matter is what is like form potentially and it becomes formed actually in every substantial becoming. But matter is unsatisfied by mobile forms; it is ordained to an immobile form. No mobile form can perfectly fulfill its potency. Since each thing is for the sake of its perfection, matter is also, from its nature, for the sake of its perfection. Meager as

⁶⁹ SCG III 22.7: “Ultimus igitur finis generationis totius est anima humana, et in hanc tendit materia sicut in ultimam formam;” cited in *The Cosmos*, 265; *Le Cosmos*, 37.

⁷⁰ Aristotle, *Physics* II 8 (199a30-31).

matter's nature is, since it is not even a being but only a principle of being, to the extent that it is not nothing, it is that which can be perfected by the form of man.

At the dawn of creation, in its initial state of a primal atom or undifferentiated plasma, matter was not prepared to become man. It was prepared only to receive the next most primitive form, which it could acquire only by the agency of various secondary movers and the First Mover. There were many steps along the path to the penultimate one, when matter was prepared as the proximate matter to receive the human form. Only at that stage could matter properly be said to *desire* (said analogously) the human form. Only then was matter in potency to the human form as that which it is like and which it needs in order to be perfected so that it can become fully the nature that it is in potency to become. Nevertheless, the final end exerts a pull all along the journey. "The goodness of man is so great that it extends itself to the very first instant of the existence of this universe that it draws to itself."⁷¹ The Divine Artist differs from human artists precisely in His ability to place the end within His creatures as an *intrinsic* ordination.

Prime matter exists for the sake of being perfected by form. It cannot have every form at once, so it must possess different forms successively. It is fully perfected only when it acquires the highest form. Therefore, matter desires its most perfect form, humanity, as the ultimate end of generation. One might make an analogy to the human desire for happiness, which is the ultimate end of every act of the will. Man desires every other good as a means to or a part of happiness. Similarly, matter desires the human form as the ultimate end of every generation.

St. Thomas gives an example of the tendency of matter to acquire successively higher forms in embryogenesis. De Koninck refers to this example again when he is considering the ontological leap from beast to man. I will consider it at length in the third part of chapter two under the heading "Embryological Development: a Sketch of Evolution."

⁷¹ *The Cosmos*, 308. "La bonté de l'homme est si grande qu'elle s'étend jusqu'au premier instant de l'existence de cet univers qu'elle tire à soi" (*Le Cosmos*, 102).

Something similar can be seen in the way that lower things serve higher things as food or fuel or elementary parts. Particles combine to form elements; elements combine to form mineral compounds; plants absorb minerals in nutrition; beasts eat plants; and finally humans eat beasts as well as plants. St. Thomas notes this later in the same chapter.

And since a thing is generated and preserved in being by the same reality, there is also an order in the preservation of things, which parallels the foregoing order of generation. Thus we see that mixed bodies are sustained by the appropriate qualities of the elements. Plants, in turn are nourished by mixed bodies; animals get their nourishment from plants. So also those more perfect and more powerful [are nourished] from those that are more imperfect and weaker. But man uses all kinds of things for his benefit.⁷²

Although there are exceptions to this rule in nature, usually the lower are used or consumed by the higher.

Why should natural beings tend toward a higher level of being? St. Thomas answers this question in an earlier chapter:

All things tend through their movements and actions towards something good as their end, as was shown above. Everything becomes like the first goodness, which is God, in so far as it participates in goodness. Therefore, all things tend through their movements and actions toward the divine likeness, as toward their ultimate end.⁷³

Matter under any form tends toward a higher form because it tends toward a greater participation in the divine likeness. When matter acquires the human form, it becomes an image of God. As De Koninck will say in his theological section, “From this point of view, we can consider the evolution of the cosmos as a maturation of traces which will terminate in an image of the

⁷² SCG III 22.8. “Quia vero per eadem res generatur et conservatur in esse, secundum ordinem praemissum in generationibus rerum est etiam ordo in conservationibus earundem. Unde videmus quod corpora mixta sustentantur per elementorum congruas qualitates: plantae vero ex mixtis corporibus nutriuntur; animalia ex plantis nutrimentum habent; et quaedam etiam perfectiora et virtuosiora ex quibusdam imperfectioribus et infirmioribus. Homo vero utitur omnium rerum generibus ad sui utilitatem.”

⁷³ SCG III 19.5. “Omnis res per suum motum vel actionem tendit in aliquod bonum sicut in finem, ut supra ostensum est. In tantum autem aliquid de bono participat, in quantum assimilatur primae bonitati, quae Deus est. Omnia igitur per motus suos et actiones tendunt in divinam similitudinem sicut in finem ultimum.”

Trinity.”⁷⁴ Man images God by knowing Him and loving Him as God knows and loves Himself. Man thereby returns creation to its principle.⁷⁵

C. Argument from Natural Forms

De Koninck’s third argument that man is the *raison d’être* of the cosmos is from the imperfect nature of corporeal forms, since the imperfect and contingent is always for the sake of the perfect and necessary. According to De Koninck, man is the goal of all other natural forms because he is the goal of matter. Matter is for the sake of form, but prime matter is unsatisfied by any lower form; matter’s desire is for something greater than any possible lower form. Subhuman forms are imperfect and mobile; only the immobile form of man can assuage matter’s desire.

Every natural form tends toward man. The idea of man bursts forth from no matter what form, even from a material point of view. The essential desire of prime matter, which always indefinitely exceeds any form received, is actuated by the immobile form of man. And in this perspective,

⁷⁴ *The Cosmos*, 330. “À ce point de vue, nous pouvons considérer l’évolution du cosmos comme une maturation de vestiges qui se terminera à une image de la Trinité” (*Le Cosmos*, 126). We will delve further into this return of man to God in our treatment of the theological section.

⁷⁵ De Koninck provides an answer to biologists who argue that there is no real purpose in nature, but only the appearance of purpose, for which Ernst Mayr, among others, uses the word teleonomy. Teleonomy denotes “end-directed behavioral activities or developmental processes of an individual or system, which are controlled by a program” [Ernst Mayr, “Cause and Effect in Biology” in *Cause and Effect: The Hayden Colloquium on Scientific Method and Concept*, ed. Daniel Lerner (New York: The Free Press, 1965), 42]. Mayr gives the examples of the development of an organism from its zygote, the migration of a bird, and the active avoidance of a predator by an animal. He does not wish to use *teleological* because it implies mind, purpose in the sense of conscious goal of an intelligent being. He does not even wish to apply *teleonomic* to the process of evolution because he does not think it is in any way end-directed. Accordingly he writes, “Historical processes, however, cannot be purposeful” (Mayr 40) because they cannot be genetically programmed. There is no DNA for the cosmos. The evolution of organisms with “programmed” teleonomic activities and man with purposeful activities is purely the result of mechanical processes.

Intelligent Design proponents argue that the intricacy of organisms and especially the coded information in the DNA shows there must be a mind designing natural things. Although this argument passes beyond the limits of a teleonomic account, it still fails to bring out the most essential point in teleology, namely, the causality of the good.

De Koninck, on the other hand, sees the good and love of the good as paramount in both organismic development and evolution. The appearance of design might conceivably come about by mechanical processes but love of the good could never come about in this way. The cosmos develops like an animal from initial simplicity and poverty of being to complexity and richness of being, drawn by the goodness of human nature (*The Cosmos* 308-309). Both the cosmos and organisms are directed toward their good or perfection by an impulse from within that is wholly natural and, in the case of the inorganic and plants, unconscious. The Creator has placed the good in the appetite of the first matter of the cosmos and brings it to completion in man when he is united to the First Good by knowledge and love.

subhuman forms are much less states than tendencies.⁷⁶

Potency is for the sake of being completed by form, but subhuman forms do not fulfill the potency of matter. Every subhuman form, being an imperfect act of matter, is more something on the way to being human than something resting in itself. “Subhuman forms are much less states than tendencies,”⁷⁷

De Koninck explains further the ladder of natural forms. He says that only man was a necessary form. Given creation of a material cosmos, it must have man as the end through which it returns to God, but any other particular form or network of forms are merely possible and indefinite. De Koninck uses the example of a line. There are an infinite number of possible natural forms like an infinite number of possible cuts in a line. Every possible form could not have been actualized just as one could not stop at every possible cut. One must jump from one cut to another without actualizing the intermediates. Likewise, nature jumped from one possible natural form to another without actualizing all possible intermediates. The particular forms that came to be were not necessary; they might have been otherwise. The original matter with its original forms would affect to some extent what forms followed, but not in a necessary way. The plan was not “front-loaded” from the beginning.⁷⁸

Therefore, whatever the initial form given, one will be unable to find in it a rigorous plan. It can show us only a preview of the forms on the scale arising from it. One can say in advance that it must arrive at life, at knowledge, at intelligence, but it is for experimental science to say how this world has been molded from the *fluxibilia et non semper eodem modo se habentia propter materiam*. And this role devolves on experimental science precisely because one is unable to make in this domain rigorous deductions in function of the necessary. Science, first of all by its research,

⁷⁶ *The Cosmos*, 266. “Toute forme naturelle est tendue sur l’homme. L’idée de l’homme jaillit de n’importe quelle forme, voire, d’un point matériel. Le désir essentiel de la matière première, qui déborde toujours indéfiniment toute forme reçue, est d’être actualisée par la forme immobile de l’homme. Et dans cette perspective, les formes infrahumaines sont beaucoup moins des états que des tendances” (*Le Cosmos*, 37).

⁷⁷ *Ibid.* “les formes infrahumaines sont beaucoup moins des états que des tendances”

⁷⁸ Michael Behe suggests frontloading as a possible origin of all biochemical systems: “Suppose that nearly four billion years ago the designer made the first cell, already containing all of the irreducibly complex biochemical systems discussed here and many others. (One can postulate that the designs for systems that were to be used later, such as blood clotting, were present but not “turned on.”...)...The cell containing the designed systems then was left on autopilot to reproduce, mutate, eat and be eaten, bump against rocks, and suffer all the vagaries of life on earth.” (Behe, *Darwin’s Black Box*, 227-228). “Since the simplest possible design scenario posits a single cell—formed billions of years ago—that already contained all information to produce descendant organisms, other studies could test this scenario by attempting to calculate how much DNA would be required to code the information.” (*Ibid.*, 231.)

tries to reconstitute the path, or the paths, followed *in fact* by nature. But it is also forced—and here is its principal aim—to find essential limits, not doubtless of the plan followed, but of the preview given in advance.⁷⁹

The original form could not give one a determinate plan for the development of life. De Koninck insists that it must have led to vegetative life, sensitive life, and intelligent life. But the particular organisms developed on the way were not given ahead of time. One cannot deduce them a priori by philosophy but only discover them by observing the empirical evidence like fossils and the array of life today. Science attempts to reconstruct the path to man and to discover what the limits were from the beginning. If the forms to be passed through were all determined from the beginning, according to De Koninck, then the future forms would already exist actually.

Still it is impossible that the entire future should be really predetermined in the past or present state of the universe. If it were, since matter is something real and not a pure logical possibility, the future would already exist; everything really possible in matter would exist simultaneously and eviternally: the pure potentiality of matter would be wholly deprived of any real meaning. And if the future is not predetermined in the present, then there is uncertainty, the future contingent.⁸⁰

De Koninck insists that prime matter truly is without any determination. He wishes to exclude the theory that matter is like a lake of determinate forms that just needs the jolt of a disposing cause to fish a particular form out of the lake. Indeed, he says that if the forms were predetermined, they would already exist, because cosmic beings are nothing but matter determined by a certain form.

Why does De Koninck say that plant life and animal life must have been reached?

These species [inorganic, plant, brute, and human] which are *quasi-genera* with respect to sub-species, are a priori certain because they constitute irreducible degrees of being: there is no intermediary between 'being,' 'living,' 'knowing,' and 'understanding.' The absolute character of

⁷⁹ *The Cosmos*, 267. "Donc, quelle que soit la forme initiale donnée, on ne sait voir inscrit en elle un plan rigoureux. Elle ne peut nous montrer qu'une amorce des formes échelonnées à partir d'elle. L'on peut dire d'avance qu'il faut en arriver à la vie, à la connaissance, à l'intelligence. Mais c'est à la science expérimentale de voir *comment* s'est moulé ce monde de "fluxibilia et non semper eodem modo se habentia propter materiam." Et ce rôle revient à la science expérimentale précisément parce que l'on ne saurait faire en ce domaine des déductions rigoureuses en fonction du nécessaire. La science, par ses recherches d'abord, essaie de reconstituer la voie, ou les voies, suivies par la nature *de fait*. Mais elle s'efforce aussi – et c'est là même son but principal – de trouver les limites essentielles, non sans doute du plan suivi, mais de l'amorce donnée d'avance" (*Le Cosmos*, 38-39).

⁸⁰ "Reflections," 408. "Partant, il est impossible que l'avenir tout entier soit réellement prédéterminé dans l'état passé ou présent de l'univers. S'il l'était, et puisque la matière est une chose réelle et non un pur possible logique, l'avenir existerait déjà; toutes les choses réellement possibles dans la matière existeraient simultanément et éternellement; la potentialité pure de la matière serait totalement dépourvue de sens réel. Et si l'avenir n'est point prédéterminé dans le présent, c'est qu'il comporte de l'incertain, du futur contingent" ("Réflexions," 233).

this gradation moreover has its ground in the idea of man whose soul is formally sensitive, vegetative, and the form of corporeity. Because man's soul is all that, not only eminently but formally, these degrees of being are susceptible of being directly realized outside him.⁸¹

Given a cosmos, these degrees of being were necessary because they alone make man possible; they were necessary developments for man to evolve. Matter must first become alive and then sensitive before it can become rational.

Let us suppose a finite intelligence contemplating the universe at a moment when it contains no actual living thing. This intelligence would be able to foresee with infallibility the coming of man into the world and also everything that conditions absolutely the determination of matter in view of the human composite: it would foresee the plant, the brute, but it would be impossible for it to foresee all the concrete ways in which natural species are realized.⁸²

It is by looking at the human form, not at prime matter, that one discovers the necessity of the other three natural species. Exactly which concrete forms would develop would be unknown and contingent.

De Koninck posits that the human form is present from the beginning in prime matter, as the final end, something like the way happiness is present in the human will by nature.

At the origin there was only natural appetite in the world, without knowledge in the subject and without intelligence. And yet the intrinsic ultimate end of the world is already inscribed in it as the term of its natural tendency. The goodness of man is so great that it extends itself to the very first instant of the existence of this universe that it draws to itself. Every appetite presupposes in effect a certain conformity of the lover to the loved, either a conformity in act or a conformity by reason of potency as proportioned to the act to which it is essentially ordered...It is thus that matter is, in all its essence, a love of the human soul.⁸³

⁸¹ "Reflections," 409. "Ces espèces, qui sont des *quasi-genera* par rapport aux sous-espèces, sont certaines *a priori*, parce qu'elles constituent des degrés d'être irréductibles: il n'y a point d'intermédiaire entre 'être,' 'vivre,' 'connaître,' et 'intelliger.' Le caractère absolu de cette gradation trouve d'ailleurs son fondement dans l'idée de l'homme dont l'âme est formellement sensitive, végétative et forme de corporéité. Parce que l'âme de l'homme est tout cela, non seulement éminemment mais formellement, ces degrés d'être sont susceptibles d'être distinctement réalisés hors de lui" ("Réflexions," 234).

⁸² "Reflections," 409. "Supposons, pour illustrer cette idée, une intelligence finie contemplant l'univers au moment où il n'y avait en lui aucun vivant en acte. Cette intelligence pourrait prévoir avec infailibilité la venue de l'homme dans ce monde et aussi tout ce qui conditionne absolument la détermination de la matière en vue du composé humain: elle prévoit la plante et la brute, mais il lui est impossible de prévoir toutes les manières concrètes dont ces espèces naturelles seront réalisées" ("Réflexions," 234).

⁸³ *The Cosmos*, 308-309. "À l'origine il n'y avait dans le monde qu'un appétit naturel, sans connaissance dans le sujet et sans intelligence. Et pourtant la fin dernière intrinsèque du monde est déjà inscrite en lui comme terme de sa tendance naturelle. La bonté de l'homme est si grande qu'elle s'étend jusqu'au premier instant de l'existence de cet univers qu'elle tire à soi. Tout appétit suppose en effet une certaine conformité. De l'aimant et de l'aimé, soit une conformité en acte, soit une conformité à raison de la puissance en tant que proportionnée à l'acte auquel elle est essentiellement ordonnée... Et c'est ainsi que la matière est, de toute son essence, un amour pour l'âme humaine" (*Le Cosmos*, 102-103).

De Koninck surprisingly speaks of *love* in matter. Prime matter is most profoundly potency to be human or *love* of the human soul. The human form is present in matter as the good that draws matter to receive every other form as a step towards that form or as a limited participation of that form.

Although the human form was present as a goal from the beginning in matter as well as the vegetative and sensitive forms, because they are contained in the goal as necessary means to the goal, no particular plant or animal form was contained in matter determinately. Any number of kinds of plants and animals could fulfill the need for matter to become alive and sensitive on its path to the human form. However, only a determinate plant or animal can exist. Plant does not exist generically, but only as oak tree or rosebush. Perhaps one could even argue that the human form was not determinate as to the actual bodily shape it would take. If different pathways of evolution had been followed, the human body could have developed quite differently. We might have had wings or fins.

D. Argument from Nature: Intrinsic Principle of Motion

De Koninck's fourth argument that man is the *raison d'être* of the cosmos is from motion and nature as an intrinsic principle of motion. Just as the mobile being is for the sake of man, so motion itself is for the sake of man. Each natural being has a movement by which it tends towards its own "individual and specific fulfillment,"⁸⁴ however, a deeper desire remains unfulfilled until it reaches the form of man. An animal embryo naturally develops from a zygote to a viable baby; a baby naturally grows into a mature adult. Yet, matter, as we saw already, is not satisfied as a principle of any subhuman cosmic being. Even when an animal has reached maturity and is performing its life functions of sensing, hunting, eating, and begetting, the material principle of its nature tends toward a higher form and higher living activities.

⁸⁴ *The Cosmos*, 269. "achèvement individuel et spécifique" (*Le Cosmos*, 41). Here De Koninck equivocates in his use of the word *specific*; he should say *sub-specific*, according to his doctrine, since specific fulfillment refers to the particular end of that kind of thing. He cannot help referring to different *kinds* of living things with different levels of perfection at the level of what he calls subspecies.

The desire of matter, while being fulfilled according to the measure of perfection of its actuating form—and in this measure the composite enjoys a certain fulfillment and rest—its essential desire persists unassuaged until it attains the spiritual form of man... Matter remains tending, under no matter what natural form, under forms increasingly more perfect. Thus matter is in its turn a principle of movement.⁸⁵

Matter, as openness to form, remains restless. It is impulse toward ascension, toward the optimal participation in God possible for a cosmic being. Thus matter is a principal of movement. Form is also a principal of movement, but it is the principle of the difference between movements flowing from different natures. “The perfection of the movement is determined by the degree of perfection of the form.”⁸⁶ One can see what De Koninck means by looking at the different activities that a very imperfect animal like an amoeba can perform compared to a perfect animal like a bird. Amoebas do little beside engulf prey; birds, on the other hand, sing and fly, mate, build nests, lay eggs and keep them warm, feed and teach their young. Birds have a multitude of higher activities that flow from their higher form. The form determines the kinds of movements and their degree of perfection while itself remaining immobile. Thus form is more the principle of movement than matter. Together, matter and form are called “nature.”

Nature is therefore an *intrinsic* principle of motion, unlike art and chance, which move things from outside. The sculptor chips the outside of the block, by his art, to make a statue, whereas nature is a power within the acorn that causes it to develop into an oak tree. “But no nature remains closed on itself,” insists De Koninck. “It is to make this precise that we insist on the notion of nature.”⁸⁷ The same nature within the acorn that causes it to develop into an oak tree has an orientation toward the good of the whole cosmos. De Koninck quotes St. Thomas as support for this statement.

⁸⁵ *The Cosmos*, 268. “Le désir de la matière, tout en étant comblé dans la mesure de la perfection de sa forme actuante – et dans cette mesure le composé jouit d’un certain achèvement et de repos – son désir essentiel persiste inassouvi jusqu’à atteindre à la forme spirituelle de l’homme – disons plutôt de l’humanité. La matière reste tendue, sous n’importe quelle forme naturelle, sur des formes toujours plus parfaites. Et ainsi la matière est à son tour principe de mouvement” (*Le Cosmos*, 40).

⁸⁶ *The Cosmos*, 268. “la perfection du mouvement est déterminée par le degré de perfection de la forme” (*Le Cosmos*, 40).

⁸⁷ *The Cosmos*, 268. “Mais aucune nature ne demeure fermée sur elle-même. Et c’est pour en arriver à se préciser que nous insistons sur la notion de nature” (*Le Cosmos*, 40).

For that seems to belong essentially to the intention of nature which is always and perpetual; while what is only for a time is seemingly not the chief purpose of nature, but as it were, subordinate to something else; otherwise, when it ceased to exist, nature's purpose would become void. Therefore, since in things corruptible none is everlasting and permanent except the species, it follows that *the chief purpose of nature is the good of the species*.⁸⁸

St. Thomas is explaining that the orientation of individual plants and animals to the good of their species is more natural than their orientation to their own individual flourishing. Reproduction and parental care of the young is preeminently natural. In a similar way, De Koninck says that natural things have an orientation to the good of the whole cosmos, which is deeply natural. This cosmic orientation is deeper and more natural than their orientation to their own individual good or specific good, because it is the primary intention of nature. The first cause always works more powerfully in the effect than the secondary cause. This is easy to see in efficient causality. The sculptor is more of a cause than the chisel and is more powerfully present in the effect. It is, however, just as true in final causality. If the goal of my drive is the store because I want to buy bread, bread is more powerful a cause than the store. I would skip the store if I met a friend on the way who gave me a loaf of bread she had just baked.

De Koninck explains further that “mobile things do not run along parallel lines to fall like a stone at the end of their journey”⁸⁹ The world view of Darwinism is completely false. Everything is not pursuing its own survival without regard to the rest of the world. Living things grow to maturity so that the goal or achievement of their growth is their own form. Yet they are also parts of their species, their ecosystems, their planet, their galaxy, and the cosmos. De Koninck insists that the orientation of each natural being to the good of its species and to the good or goal of the cosmos, namely, bringing forth the human form, is not something accidental added on to its nature but its deepest orientation. “A nature is essentially a principle of ascending movement, it is

⁸⁸ ST I 98.1: “Id enim per se videtur esse de intentione naturae, quod est semper et perpetuum. Quod autem est solum secundum aliquod tempus, non videtur esse principaliter de intentione naturae, sed quasi ad aliud ordinatum, alioquin, eo corrupto, naturae intentio cassaretur. Quia igitur in rebus corruptibilibus nihil est perpetuum et semper manens nisi species, bonum speciei est de principali intentione naturae, ad cuius conservationem naturalis generatio ordinatur.”

⁸⁹ *The Cosmos*, 268. “Les mobiles n’avancent pas sur des plans perpendiculaires [“Parallel,” as McInerney corrected it in his translation, makes more sense.] pour tomber à pic au bout de leur chemin” (*Le Cosmos*, 41).

profoundly impulse [élan].”⁹⁰ Thus, De Koninck concludes, the goal of each cosmic being’s nature as well as the goal of universal nature is the generation of man.

De Koninck has now argued that the *raison d’être* of the cosmos is man in four ways: from the nature of mobile being, of matter, of natural forms, and of nature as a principle of motion.

E. Man: Goal of the Cosmos as Individual or Species?

If man is the goal of the cosmos, De Koninck asks, is it one man or the whole species that is the goal? “Neither,” answers De Koninck. One man is only a part of the human species; a part is always intended for the sake of its whole.⁹¹ However, since a species only exists in an indefinite number of individuals, then this indefinite number cannot be the goal. Something indefinite can never be a goal since it can never be realized. De Koninck concludes, “We must therefore say that a multitude of human individuals, *numerically definite*, is the final end of the cosmic universe.”⁹²

St. Thomas says the same in the *Prima Pars*.

Therefore, we must say that the number of the predestined is certain to God, not only formally, but also materially. It must, however, be observed that the number of the predestined is said to be certain to God, not only by reason of knowledge, because, namely, he knows how many are to be saved (since God is certain in this way about the number of drops of rain and the sands of the sea); but by reason of His deliberate choice and determination.⁹³

In this article, St. Thomas compares the creation of the cosmos to building a house. The builder intends a certain number of rooms with definite proportions but the number of stones is not directly intended. Their number is only chosen because it is what is needed to complete the walls of that number of rooms. So the number of infrahuman subspecies and individuals is only indirectly chosen because it is what is necessary to maintain the species so that they can serve as

⁹⁰ *The Cosmos*, 269. “Une nature est essentiellement un principe de mouvement ascendant, elle est profondément élan” (*Le Cosmos*, 41).

⁹¹ One might add that human reproduction shows that nature intends the species and not an individual.

⁹² *The Cosmos*, 267. “Force nous est donc de dire qu’une multitude d’individus humains numériquement inscrite est la fin dernière de l’univers cosmique” (*Le Cosmos*, 39).

⁹³ *ST I* 23.7: “Et ideo oportet dicere quod numerus praedestinatorum sit certus Deo non solum formaliter, sed etiam materialiter. Sed advertendum est quod numerus praedestinatorum certus Deo dicitur, non solum ratione cognitionis, quia scilicet scit quot sunt salvandi (sic enim Deo certus est etiam numerus guttarum pluviae, et arenae maris); sed ratione electionis et definitionis cuiusdam.

parts of the universe, but the number of the Elect is fixed because they are the principal parts of the cosmos that directly attain the ultimate end.

In *Ego Sapientia*, a Mariological work published in 1943, De Koninck also says that the saints, as ordained to Christ and the Blessed Virgin Mary, are the final cause of the universe. “The creation of God is ordained, as to its end, to the justification and glorification of the Saints, accomplished by Christ through the Blessed Virgin; for the order of nature was created and instituted for the order of grace.”⁹⁴

F. Excursus on Creationism

Before De Koninck takes up the mechanism of evolution, he prepares the reader for the close involvement of God and the angels that he sees in evolution by a critique of creationism. By creationism, De Koninck means the doctrine that God created each species instantaneously. De Koninck suggests that some Catholics reject any theory of evolution because they believe nature is cut off from the angels and God. They see the cosmos as a closed system. God may have created it, but now everything in nature can and must be explained by intracosmic causes. Anything else would be unscientific.

Since Suarez, scholastics have abandoned more and more resolutely the ontological point of view in the explanation of nature. One imagines that scientific explanations replace the philosophy of nature and one retains only what is directly useful for theology.⁹⁵

It is absurd to the modern mentality to consider whether angels could be moving the planets in their orbits or directing the evolution of new species. The laws of nature are sufficient to explain natural phenomena. Looking to spiritual causes is primitive supernaturalism. This is far from the case, according to De Koninck. Whatever scientific explanations one discovers for

⁹⁴ *Ego Sapientia*, 19. “la création de Dieu a été ordonnée, comme à sa fin, à la justification et la glorification des Saints, accomplies par le Christ moyennant la Bienheureuse Vierge; car l'ordre de nature a été créé et institué pour l'ordre de grâce” (*La Sagesse*, 31).

⁹⁵ *The Cosmos*, 269-270. “Depuis Suarez, les scolastiques abandonnent de plus en plus résolument le point de vue ontologique dans l'explication de la nature. L'on pense que les explications scientifiques remplacent la philosophie de la nature et l'on ne s'attache qu'aux notions directement utilisables en théologie” (*Le Cosmos*, 42).

material phenomena like gravity or genes, they do not eliminate the need for ontological explanations.

I say that no intra-cosmic cause can give me an ontological explanation of the movement of the moon, not because the movement of the moon particularly interests me in philosophy of nature, but it is the movement of an inorganic phenomenon and it is as such that I consider it.⁹⁶

According to De Koninck, no scientific explanation can sufficiently explain the motion of the moon or even of a billiard ball. Does this mean that ontological explanations can replace scientific explanations? Not at all; both are necessary. “If I have a headache because God wishes it, that does not prevent me from attributing it to a too long night and accepting that an aspirin might relieve it.”⁹⁷ The wise man should seek both kinds of explanations. De Koninck concludes with a very strong statement rejecting creationism. “Creationism which opens the world directly to God, bypassing the universal hierarchy, implicitly rejects what is essential to the universe: the unity of order.”⁹⁸ If God and the material cosmos are not connected by a hierarchy of intermediate spiritual agents, the angels, then there is no principle of order uniting visible and invisible creatures in a single universe.

De Koninck has shown that the goal of natural beings and nature is humanity. Furthermore, he has proposed that God and angels are intimately involved in the workings of nature. Now De Koninck takes up the ontological mechanism that allows natural beings to reach their goal. What are the causes of evolutionary change in evolution? De Koninck will treat three major questions: (1) How can something higher come from something lower? (2) How is evolution natural? (3) Can God and nature both be the cause of evolution?

⁹⁶*The Cosmos*, 270. “Or, je dis qu’aucune cause intracosmique ne peut me donner une explication ontologique du mouvement de la lune, non pas que le mouvement de la lune m’intéresse particulièrement en philosophie de la nature, mais il est mouvement d’un phénomène inorganique, et c’est en tant que tel que je le considère” (*Le Cosmos*, 42).

⁹⁷*The Cosmos*, 270. “Si j’ai mal à la tête parce que Dieu le veut, n’empêche que je puis l’attribuer à une trop longue veillée, et qu’une aspirine pourra m’en délivrer” (*Le Cosmos*, 42).

⁹⁸*The Cosmos*, 269. “Le créationnisme, qui sous tous les rapports ouvre le monde directement sur Dieu en passant à côté de la hiérarchie universelle, rejette implicitement ce qui est essentiel à l’univers: l’unité d’ordre” (*Le Cosmos*, 42).

3. How Can Something Higher Come From Something Lower?

I will next consider De Koninck's treatment of the causes of the evolutionary changes from non-living to living, plant to animal, and animal to man. They are covered in his sections six through eleven. In every case, we will see the necessity of a spiritual agent. The lower is never the cause of the higher except by the power of a superior agent.

A. The Inorganic World: From Non-Living to Living

De Koninck first considers the ontological mechanism of biogenesis. He distinguishes the nature of non-living bodies from living bodies. Then he shows that every motion of a non-living being requires another cause. Only a transcosmic spiritual agent can explain the natural motions of inorganic bodies. Finally he uses these considerations to consider the origin of life. Life arises by the causality of the same spiritual agent that is already called for by the motions of inorganic nature.

(1) The Difference between Living and Non-Living Things

De Koninck begins by distinguishing between living and non-living things and in particular between how we know them. Although scientists try to explain organisms in terms of their smallest inorganic parts, we know living things and life much better than non-living things. So scientists are explaining the more known by the less known. "In opposition to what materialists think, speaking formally, we know life better and more immediately than non-life."⁹⁹

De Koninck uses St. Thomas to corroborate the certainty of our knowledge of life. In his commentary on *De Anima*, one of the reasons St. Thomas gives for the nobility of our knowledge of the soul is its certainty. He says that this knowledge is certain because we all experience in ourselves what it means to have a soul and to be alive.¹⁰⁰ "But this experience is the point of

⁹⁹ *The Cosmos*, 270. "À l'encontre de ce que pensent les matérialistes, à parler formellement, nous connaissons infiniment mieux et plus immédiatement la vie que la non-vie" (*Le Cosmos*, 43).

¹⁰⁰ *Sentencia De anima* I lectio 1.6.

departure proper to the science of life,”¹⁰¹ De Koninck explains. We grasp life in others only through various signs of life, such as their forms and activities. For this reason we can be mistaken. We can think a manikin or a dead turtle are alive; we can mistake a plant for an animal or vice versa, but we can never be mistaken when we experience that we ourselves are alive and conscious.

We are conscious that we see and hear and feel. We experience ourselves as the principle of our activities. We think; we will; we write; we speak; we stand up and sit down. We observe signs of similar activities in other men and animals and so we conclude that they are performing similar activities in a similar way. When I see a man facing me and smiling I assume that he is seeing me just as I am seeing him. I do not have the same internal experience of his seeing that I have of my own seeing. But I have some knowledge of life in all living things from my own experience of life.

“If we have a positive knowledge of life, we do not have that kind of knowledge of non-life—such knowledge [from the inside] would be for us manifestly contradictory,” argues De Koninck.¹⁰² Even the word *non-living* indicates that living beings are prior to the non-living in our knowledge. Although I have no internal experience of inorganic existence, it would be absurd to conclude that everything must be alive. It is less absurd, however, than to conclude there is nothing essentially different between living and nonliving beings. Materialists, who maintain that life is only an epiphenomenon, contradict the most certain experience we have of our own life. Once materialists begin trying to explain living things by non-living things, they will never be able to arrive at life. “The living will only be constructed from the non-living.”¹⁰³

¹⁰¹ *The Cosmos*, 270. “Or c’est cette expérience qui est le point de départ propre à la science de la vie” (*Le Cosmos*, 43).

¹⁰² *The Cosmos*, 271. “Si nous avons une connaissance positive de la vie, nous n’avons aucune connaissance de ce genre de la non-vie – telle connaissance serait pour nous manifestement contradictoire” (*Le Cosmos*, 44).

¹⁰³ *The Cosmos*, 271. “Le vivant ne pourra être reconstruit qu’avec du non-vivant” (*Le Cosmos*, 44).

Let us consider an example to clarify what De Koninck is saying. When seeing is defined as wavelengths of light hitting the retina followed by nerve impulses to the brain, seeing has disappeared. Such physical effects are, no doubt, crucially involved in seeing but they don't explain its essence. Seeing is a way of knowing bodies; it is a way of possessing the form of a colored body without the body. When biologists attempt to explain living things and their activities without reference to their own experience of life, they necessarily reduce biology to chemistry and physics. They give away the advantage they have of being *living* observers of life, and reduce life to the obscurity of the inorganic.

But "if non-life is essentially obscure, vegetative life is also for the most part obscure," explains De Koninck. "In it we do not touch ourselves as in conscious life."¹⁰⁴ Nevertheless, although vegetative life is obscure, we can still observe that even plants affirm themselves; they work actively to nourish themselves, grow, and reproduce. All life thus demonstrates self-motion and interiority. Even a plant is a subject (in a reduced sense) that moves itself toward certain goals. What such interiority is in plants is mysterious, since they have no consciousness like us. However, plants' active work to stay alive suffices for De Koninck to define the essential characteristics of life as self-movement and interiority. The non-living has no such interiority; it does not move itself for its own sake, but can only be moved by exterior agents.

Because of this interiority, living things have a much greater unity than non-living things. It is much easier to identify a plant or an animal as a substantial whole separate from its surroundings. There is an elephant. There is a tree. But it is very difficult to identify the ontological unit among non-living things. Is a rock one or many substances? Can separation in space be enough to define unity of being? What about molecules and atoms? At what level do substances exist among inorganic beings? De Koninck admits his ignorance. It is a question that is still open today.¹⁰⁵

¹⁰⁴ *The Cosmos*, 271. "Si la non-vie est essentiellement obscure, la vie végétative a également sa grande part d'obscurité. En elle nous ne nous touchons pas comme dans la vie consciente" (*Le Cosmos*, 44).

¹⁰⁵ *The Cosmos*, 272.

(2) Every Motion of a Non-living Beings Needs an Extrinsic Cause

Whatever the individual substances are among inorganic beings, whether they exist at the atomic, the molecular or the stellar level, according to De Koninck, they are essentially passive. “If interiority, self-movement, is the essential character of life, we ought to define the non-living by denying of it all interiority. It does not move itself. All movement comes to it from without; it is moved and can only move insofar as it is moved.”¹⁰⁶

This is another difficult point to see. Many inorganic bodies are in motion and it looks as though their motion comes from within; at least there is no other visible mover. For example, when chemicals react to form a new substance, it looks as though they are actively joining together. Planets revolve around the sun, projectiles continue to move after being thrown, and radioactive bodies spontaneously emit high-energy particles. Yet, we would not wish to say that chemicals, planets, and projectiles are alive. De Koninck is confident that self-movement belongs only to the living; he does not see anything like his experience of interiority in non-living things. There is the whisper of a self in plants, but not in chemicals or planets.

When something non-living moves, De Koninck argues, there must be something else moving it, even if it is invisible. “One cannot say otherwise without falling into hylozoism.”¹⁰⁷ According to De Koninck, if everything could move itself, everything would be alive. Yet, he says, non-living bodies still have natures. Nature can be the passive source of being moved; it need not always be the active source of self-movement. Since non-living things clearly do move even though they cannot move themselves, one must look outside them for the active cause of their motion.

Every movement must have the unmoved mover as its first cause, but it is also important to seek the proximate causes of motion in nature. What is the proximate cause of the motion of

¹⁰⁶ *The Cosmos*, 272. “Si l’intériorité, le mouvement de soi, est le caractère essentiel à la vie, nous devons définir le non-vivant en lui déniaient toute intériorité. Il ne se meut pas. Tout mouvement lui advient du dehors – il est mû, et ne peut mouvoir qu’en tant que mû” (*Le Cosmos*, 46).

¹⁰⁷ *The Cosmos*, 272. “On ne peut parler autrement sans tomber dans l’hylozoïsme” (*Le Cosmos*, 46).

inorganic matter? What corresponds to the passive potency of matter not only to local motion or alteration but also to substantial change? De Koninck turns to St. Thomas to discover the active power responsible for motions of nonliving bodies in nature.

Every passive potency has a corresponding active potency; for (passive) potency exists for the sake of act, just as matter exists for form. But, a being in potency can never arrive at act save in virtue of another which actually exists. Therefore, [passive] potency would be useless if there were not an agent endowed with an active power which can bring it to actuality. But there is nothing useless in nature, and consequently, everything which, like matter, is in potency relative to generation and corruption, can only arrive at act by means of the active power which resides in the heavenly body which is the first active principle of nature. But, just as the celestial body is the first agent with respect to inferior bodies, so God is the first agent for every created being.¹⁰⁸

In this passage, St. Thomas argues that since there is nothing useless in nature, there cannot be any potency in nature without a suitable agent to bring it into existence. There must be an agent (the celestial body) that enables matter to achieve its goal of acquiring form or its existence would be contradictory. God would not create a principle of being that is potency or desire that could never be fulfilled.

Aristotle and St. Thomas use the principle, “There is nothing useless in nature,” frequently. It is not self-evident to a post-Darwin thinker. There are thousands of acorns that never germinate, vestigial organs in animals, and junk DNA in chromosomes. If, as is evident to observation, there is chance in nature, there are also useless events, products, and activities. Things that happen by nature happen always or for the most part. Nature leaves room for a certain degree of indetermination and even for individual failures. Nevertheless, the ultimate principles of cosmic beings, matter and form, cannot be useless, nor can the ultimate goal of the cosmos fail to be reached. Otherwise God would have failed in His wisdom or power.

¹⁰⁸ SCG II 23.5: “Omni potentiae passivae respondet potentia activa. Potentia enim propter actum est, sicut materia propter formam. Non potest autem ens in potentia consequi quod sit actu nisi per virtutem alicuius existentis in actu. Otiosa igitur esset potentia nisi esset virtus activa agentis quae eam in actum reducere posset: cum tamen nihil sit otiosum in rebus naturae. Et per hunc modum videmus quod omnia quae sunt in potentia materiae generabilium et corruptibilium, possunt reduci in actum per virtutem activam quae est in corpore caelesti, quod est primum activum in natura. Sicut autem corpus caeleste est primum agens respectu corporum inferiorum, ita Deus est primum agens respectu totius entis creati,” cited in *The Cosmos*, 273; *Le Cosmos*, 47-48.

Hence, since there is the potency in bodies to move and in matter to acquire forms, there must be an active power that can bring about the fulfillment of this potency. St. Thomas believes that the celestial body is the first active principle of nature that causes all the motions of lower bodies, while the celestial body itself must be moved by a living being.

Only a living being could have the active power to cause motion since non-living things are precisely bodies that cannot move themselves, but no living being in the cosmos has such power. De Koninck lists two reasons for this. First, the motions of the inorganic substances are necessary for living things to come to be and to live. So, for example, there could be no life on earth without the water cycle or the rotation of the earth. Therefore, no earthly or cosmic living thing could cause the motions of the water cycle and the rotation of the earth because their life depends on those motions already existing. Second, if prime matter only makes sense because it is for the sake of acquiring natural forms, then the power that can bring it to its goal must exist before it does, so that it can come into existence with this goal.

St. Thomas places the active power of motions of earth in the heavenly body, which he thought was above the realm of generation and corruption. He surmised that the heavenly body was an instrument moved by a spirit, although he says that it could also be a living being with its own soul, or moved directly by God.

It does not differ, however, according to the present intention, whether the celestial body is moved by a conjoined intellectual substance which is its soul or by a separate substance, or whether each celestial body is moved [immediately] by God.¹⁰⁹

De Koninck admits that we have discarded St. Thomas's astronomy; we no longer consider the heavenly bodies the intracosmic instruments for all of the motions in the world. Nonetheless, De Koninck maintains that St. Thomas's arguments remain in force.

We know moreover that the celestial body was in its turn moved by a separate substance, by a pure spirit. If we have, centuries since, abandoned the surpassed astronomy implied by the text of St. Thomas, we have wrongly rejected the philosophical idea beneath the argument. If we cannot point to the intracosmic instrument, which the being endowed with the active power necessary to

¹⁰⁹ SCG III 23.12: "Non differt autem, quantum ad praesentem intentionem, utrum corpus caeleste moveatur a substantia intellectuali conjuncta quae sit anima ejus vel a substantia separata, et utrum unumquodque corporum caelestium moveatur [immediate] a Deo."

the cosmos makes use of, we are no less obliged to affirm its existence.

By that argument we do not mean to establish the identity of this cause—is it God or a created transcosmic being, a species of demiurge? But it does show that the cosmos is open to another world which acts on it. And this cause can only be a living being; it is necessarily a pure spirit, a transcosmic being. For if we placed it within the cosmos, the same problem would arise again. And if the pressure exercised on the cosmos is spiritual pressure [*pression spirituelle*], from whatever being it come, it sufficiently explains the ascendant movement demanded by nature.¹¹⁰

All of the motions in the inorganic world, both local motion and qualitative and substantial change require a first active power. De Koninck follows St. Thomas in maintaining that the active power ultimately belongs to a living being. The living being cannot itself be material but must stand outside this cosmic world of change. It is a spirit or God.

De Koninck also seems to follow St. Thomas in positing an intracosmic instrument of the spiritual power. “If we cannot point to the intracosmic instrument, which the being endowed with the active power necessary to the cosmos makes use, we are no less obliged to affirm its existence.”¹¹¹ Grammatically, this sentence makes most sense if one takes “*its* existence” to refer to the intracosmic instrument. Today, it may be difficult to believe that an intracosmic instrument powers all stellar, planetary and projectile motions, chemical reactions, and the reproduction of organisms much less to conceive of what that intracosmic instrument could be. De Koninck offers no suggestion about the identity of the universal intracosmic instrument, although a number of contemporary philosophers and physicists do try to identify such an active

¹¹⁰ *The Cosmos*, 274; translation modified. “Nous savons par ailleurs que le corps céleste était à son tour mu par une substance séparée, par un esprit pur. Si nous avons depuis des siècles abandonnés l’astronomie périmée impliquée dans ce texte de saint Thomas, nous avons eu tort de rejeter l’idée philosophique sous-jacente à cet argument. Si nous ne savons mettre le doigt sur l’instrument intracosmique dont se sert l’être doué de la puissance active nécessaire au cosmos, nous n’en sommes pas moins obligés d’en affirmer l’existence.

Par cet argument nous n’entendons pas établir l’identité de cette cause – est-ce Dieu ou un être créé transcosmique, une espèce de demiurge? Mais il démontre que le cosmos est ouvert sur un autre monde qui l’ébranle. Et cette cause n’est pas qu’un être vivant: elle est nécessairement esprit pur, étant transcosmique. Car si nous l’intégrons au cosmos, le même problème se pose à nouveau... Et si la pression exercée sur le cosmos est une pression spirituelle, de quelque être qu’elle soit, elle explique suffisamment le mouvement ascendant exigé par la nature” (*Le Cosmos*, 48).

¹¹¹ *The Cosmos*, 274. “Si nous ne savons mettre le doigt sur l’instrument intracosmique dont se sert l’être doué de la puissance active nécessaire au cosmos, nous n’en sommes pas moins obligés d’en affirmer l’existence” (*Le Cosmos*, 48).

power.¹¹² If De Koninck posits an intracosmic cause of motions, it is because nature would be incomplete without it. Every natural body could be moved directly by God, but an intermediate secondary cause within nature increases the coherence of the cosmos. De Koninck also posits a transcosmic angelic cause of cosmic motion.

Suarez, in denying the apodictic force of the arguments presented by St. Thomas to show in a strictly rational way the existence of pure spirits, cuts every essential link between the cosmos and the created spiritual universe... Creationism, which opens the world directly to God, bypassing the universal hierarchy, implicitly rejects what is essential to the universe: the unity of order.¹¹³

It perfects the order and unity of the universe more to have beings of different levels of perfection woven together in a chain of causality, the higher giving causality to the lower than to have God moving all cosmic beings without intermediates. God gives greater perfection to the universe by giving an intracosmic cause and an angel or perhaps a number of intermediates the perfection of being causes.¹¹⁴

(3) *The Origin of Life*

De Koninck suggests that the generation of the first life form results from the causality of the same spirit that moves inorganic matter. “And if the pressure exercised on the cosmos is spiritual, from whatever being it come, it sufficiently explains the ascendant movement demanded by nature.”¹¹⁵ Since all the natural motions of inorganic bodies from the falling of a rock to the

¹¹² The philosopher Joseph Bobik suggests that the four forces (i.e. the strong nuclear force, the weak nuclear force, the electromagnetic force, and the force of gravity) of subatomic particles might replace the active power of the heavenly bodies. “In today’s firmer view, the four forces could perhaps replace (as the required agent causes) the active power of the light and heat of the heavenly bodies of the older, and considerably less firm, view” (*Aquinas on Matter*, 223). Physicist Eric Chaisson sees cosmic expansion as the active power causing the rise of complexity in the universe, “The present work seeks to specify... that causative agent, or prime mover, in the guise of cosmic expansion which, in turn, advances the arrow of time” (*Cosmic Evolution*, 204).

¹¹³ *The Cosmos*, 269. “Suarez, en niant la valeur apodictique des arguments présentés par saint Thomas pour démontrer par voie strictement rationnelle l’existence d’esprits purs, coupa tout lien essentiel entre le cosmos et l’univers spirituel créé... Le créationnisme, qui sous tous les rapports ouvre le monde directement sur Dieu en passant à côté de la hiérarchie universelle, rejette implicitement ce qui est essentiel à l’univers: l’unité d’ordre” (*Le Cosmos*, 42).

¹¹⁴ *The Cosmos*, 292-293.

¹¹⁵ *The Cosmos*, 274. “Et si la pression exercée sur le cosmos est une pression spirituelle, de quelque être qu’elle soit, elle explique suffisamment le mouvement ascendant exigé par la nature” (*Le Cosmos*, 48).

rotation of the earth require a spiritual power, De Koninck finds it coherent that the same spiritual power already acting in nature causes the rising movement of evolution.

De Koninck uses the phrase “spiritual pressure” to describe the influx of the active power of the spirit on the cosmos. He may have chosen the term “pressure” to emphasize the consistency of the influx of power, like air pressure which pushes down on everything on earth at all times. Nothing inorganic in the cosmos can operate at any time without this permanent influx of active power moving it in its natural motions. Nothing undergoes substantial change without this spiritual power. De Koninck quotes St. Thomas describing how this pressure operates in substantial change as a *heavenly power*.

The heavenly power is in all lower bodies as the power of a mover is in the thing moved, to bring each thing into its species according to the disposition of the matter; and these heavenly powers received in the elements are called by the Philosopher powers of soul (*De Animalibus* 16); he says that all the elements are full of them, since powers of this kind are sufficient for the animation of matter, if it attains to some equality of composition.¹¹⁶

St. Thomas says that the power of the heavens (moved by a spirit) is in the elements all the time causing them to come alive when organized in the appropriate way.

Matter is like coke that is shaken up in a bottle. It acquires a pressure from the agent who shook it so that the bottle needs only to be opened and pointed to burst forth and hit a target. Matter or, more properly, the elements have “powers of soul” which are powers from a higher agent. The elements only need to be channeled to burst forth into life or higher life because the higher agent is always pouring these powers into matter. Thus matter, in a way, has these forms (potentially and by a positive tendency) and, in a way, does not have these forms (actually or determinately). The phrase “educe the form” tries to point to the almost-but-not-quite presence of the forms in matter. The Spirit not only moves over the water (formless matter) as Genesis tells

¹¹⁶ *In II Sent.* d. 18. 2.3 ad 5: “Virtus caelestis in omnibus corporibus inferioribus sicut virtus motoris in moto, ut inducat unumquodque in speciem secundum materiae dispositionem: et hae virtutes caelestes in elementis receptae vocantur a philosopho in 16 *de animalibus* ‘virtutes animae,’ quibus omnia elementa plena dicit, eo quod huiusmodi virtutes sunt sufficientes ad animationem materiae, si pertingat ad aliquam complexionis aequalitatem,” Aristotle, *On the Generation of Animals* II.3 (736b30); referred to in *The Cosmos*, 346, footnote 85; *Le Cosmos*, 71, footnote 58.

us, but the Holy Spirit broods over the world as Gerard Manly Hopkins writes.¹¹⁷ Brooding presupposes eggs (the elements or first composites) that have not only a passive power but also a positive tendency.

“Pressure” is what is needed to push a body uphill; without pressure the body will rest at its current level. No evolutionary ascent can take place without this “spiritual pressure;” otherwise organic soup remains organic soup and like generates like. It is a spiritual impetus, not a material force, yet it may use a material force as an instrument.¹¹⁸ The impetus is within the elements, whatever the elements are. As St. Thomas says, “The heavenly power is in all lower bodies as the power of a mover is in the thing moved, to bring each thing into its species according to the disposition of the matter.”¹¹⁹ The spiritual power is always present and bubbling in every composite as the power to become whatever the composite is disposed to become.¹²⁰

The image of air pressure is somewhat misleading, however, because the heavenly powers are not vague and indeterminate, pushing every which way and only accomplishing something definite, when another agent disposes the matter in a definite way. They are the power of a spiritual agent or agents and thus are motion from an intellect like the motion in the chisel from a sculptor. A particular form is drawn forth by the power of the intellect intending that particular form. Thus the power of the spiritual agent works both within the elements as the power to acquire this or that particular form as well as providentially in the workings of nature as a whole to bring about the correct disposition of matter at this place and time so that a particular form can be drawn forth.

¹¹⁷ “The Holy Ghost over the bent/ World broods with warm breast and with ah! Bright wings.” Gerard Manly Hopkins, “God’s Grandeur,” lines 13-14.

¹¹⁸ The spirit may use the strong and weak nuclear forces within particles, heat, gravity, or the expansion of the universe or all of these. There may be some other power of matter yet to be discovered that the spirit uses to cause generations.

¹¹⁹ *In II Sent.* d. 18, q. 2, a. 3, ad 5: “Virtus caelestis in omnibus corporibus inferioribus sicut virtus motoris in moto, ut inducat unumquodque in speciem secundum materiae dispositionem.”

¹²⁰ Life from the beginning works within the constraints of the concrete composite at hand. Since life developed with DNA and genes that turn on or off, this limits the range of possibilities and produces certain structures and not others. Powers of soul are going to be mathematically channeled. They can’t flow anywhere.

The metaphor of the shaken coke bottle could be taken a little further. When the coke bottle is opened, the coke will only spurt a certain distance. The coke doesn't have the power to spurt all the way up a hill to hit a target. However, if, after hitting one target, it were repositioned at the new target and again shaken and opened, it could hit one target after another until it hit the target on the top of the hill. The spiritual pressure bubbling within the composite has the power to draw forth the form, which the composite is prepared for; the composite is not prepared to become human or even animal immediately. However, step-by-step, the spiritual pressure both organizes the cosmos as a whole as well as draws forth forms within composites and thereby enables matter to approach the human form.

"Pressure" has some less useful connotations as well. If someone is pressured to do something, they are being pushed to do what is against their will. "Pressure" can imply violence, which is the opposite of what De Koninck is trying to describe. The spiritual pressure is the influx of the active power called for by every cosmic being. It is what enables cosmic beings to perform their natural activities or undergo natural changes; it is what makes inorganic matter able to move and to be transformed into a living being. It enables natural beings and the cosmos they make up to reach fulfillment.

According to De Koninck, the intellectual nature that causes change in the cosmos does not work directly on prime matter, which does not exist by itself. Nor is that spirit the form of matter. The spirit works on composites by some cosmic instrument the way a sculptor works on stone with a chisel.

Acting on the cosmos, he unfolds it, according to laws inherent in the cosmos, just as the sculptor submits to the exigencies of stone in order to extract his work. But the pure spirit acting on the world does not make a work of art. His influence brings forth natures.¹²¹

As the sculptor works with the properties of stone, the spirit works with the properties of already existing composites. The sculptor cannot sculpt a pink statue from white marble; nor does the

¹²¹ *The Cosmos*, 274. "Agissant sur le cosmos il l'ébranle selon les lois inhérentes au cosmos, comme le sculpteur qui se soumet aux exigences de la pierre dont il extrait son œuvre. Mais l'esprit pur en agitant le monde ne fait pas œuvre d'art. Sa poussée ébranle des natures" (*Le Cosmos*, 49).

spirit bring forth water from sulfur. The spirit extracts natures from the cosmos according to the “laws” or properties already inherent in cosmic beings. However, De Koninck makes clear a great difference between the sculptor and the pure spirit. The sculptor can only work from the outside; he works on the exterior of the stone by chipping and drilling it (forms of violence); the pure spirit moves bodies from within according to their natural tendencies. The spirit “unfolds the cosmos”; “he brings forth natures” that nature as matter *desires* to become from the beginning, by the “powers of soul” always present in composites.

The alternative to understanding the cosmos as open to constant spiritual pressure that causes its changes, including evolutionary development, is to believe that the world is closed in on itself and fundamentally meaningless.

If in philosophy of nature we close the world at its summit, we will be spontaneously led to explain everything from below. The first evolutionists had the world begin from chance, the imperfect was the unique and principal cause of the more perfect. And Haeckel derived a diabolical pleasure from seeing the world emerge from nothing.¹²²

If philosophy of nature closes off the cosmos from spiritual reality; it must try to explain everything from the motion and arrangement of its simplest parts, from atoms or particles or forces. Materialist evolutionists, from Empedocles to Richard Dawkins, say that everything in the world, all the variety and richness of life even to the rational life of men, comes from chance. “The first evolutionists had the world begin from chance; the imperfect was the unique and principal cause of the more perfect.” This position remains absurd.

Opening the cosmos to a spiritual power that directs the process of evolution to its goals removes the difficulty of spontaneous generation. Even if life first came forth from an organic soup, it would also come forth through the agency of a living being, the spirit that is directing the process of evolution.

Is there any need to say that this conception does not question the adage *omne vivens ex vivo*, a principle necessary in philosophy? What we do reject here is that the living terminus *a quo* must

¹²² *The Cosmos*, 275. “Si, en philosophie de la nature, nous fermons le monde par en haut, nous serons spontanément amenés à tout expliquer par en bas. Les premiers évolutionnistes faisaient sortir le monde du hasard, l'imparfait était cause unique et principale du plus parfait. Et Haeckel ressentit un plaisir diabolique à voir ce monde se tirer du néant” (*Le Cosmos*, 50).

be a univocal cause. The principle cause of cosmic life and of its rising line is neither of the same species nor of the same natural genus, but it is nevertheless a living being.¹²³

De Koninck says that he agrees with the adage *every living thing comes from a living thing*. However, in the case of biogenesis, he changes its normal meaning. The adage usually means that every living thing is generated by a living parent from its substance. De Koninck proposes that when life is generated from nonliving matter, a living thing, a spirit, generates a new living thing from inorganic matter rather than from its own substance.

In the usual contemporary account of biogenesis, molecules from the primitive ocean combine to form a living cell under the influence of a burst of heat energy. Let us analyze the process ontologically using De Koninck's suppositions. The spiritual agent acting through nature has brought the molecules together so that they combine. They are both the beginning composite that is like matter because it has the form of the organism potentially, and they are instrumental agents that act upon each other. They cannot be the principal causes of the organism they generate, since they cannot give a form, a living soul, that they do not possess; nor do they act for their own end. The proximate intracosmic agent that uses the molecules as instruments is not clear. The sun, lightning and radioactivity have been suggested. Once a molecule or clump of molecules is sufficiently organized, it acquires a living soul, by the "powers of soul" always streaming within the elements from the spiritual agent moving them toward form.

De Koninck thinks there must be an intellect applying cosmic powers like heat or radiation in particular acts to cause the organization necessary for essential leaps. The alternative would be to argue that cosmic bodies acting in their natural ways will, by chance, occasionally cause composites to be organized in such a way as to be disposed to a higher form. We can see an example of higher organization coming from lower organization in the formation of snowflakes or generally of crystals. The sun, acting by its natural power, heats water, which causes various

¹²³ *The Cosmos*, 287. "Est-il besoin de dire que cette conception ne porte pas atteinte à l'adage "omne vivens ex vivo," principe nécessaire en philosophie? Ce que nous rejetons ici, c'est que le vivant terminus *a quo* doive être une cause univoque. La cause principale de la vie cosmique et de son élan ascendant n'est ni de la même espèce, ni du même genre naturel, c'est néanmoins un être vivant" (*Le Cosmos*, 73).

motions that result in millions of different patterns of snowflakes. It does not, at first glance, seem necessary to posit a snowflake angel that is directing the process. Admittedly, a living cell is millions of times more complicated than a snowflake. Nevertheless, it doesn't seem impossible, although improbable, that so complicated an organization could come about by natural beings acting and reacting naturally.

However, if one thinks about the being of a snowflake or of a living cell, one can see that the organization has actuality; the order is a real, although accidental being. Universal causes do not cause being in a vague indeterminate way, while more particular agents cause more determinate being. Universal causes are the cause of all the being there is in a thing, in all its particularity. The spiritual pressure within the elements cannot cause indeterminate being, which needs to be determined by the actual organization of any body. This would only make the universal cause, the cause of potency. Therefore the spirit exerting pressure on the cosmos must be responsible for the particular organization of bodies as well as for the eduction of the form, when the body is properly disposed. It must direct the motions of bodies so that they come together and react with each other in such a way as to produce the organization proper for new beings. This seems to fit with De Koninck's words about spiritual activity causing evolution.

If we integrate into the cosmos spiritual activity which works it in its rising movement, we do not follow the ancients who say only spontaneous generations (already an improper term) popping up everywhere. It is for experimental science to find where and in what conditions life appeared.¹²⁴

De Koninck describes the spiritual activity as *working* the cosmos in its rising movement, which corresponds well to the spirit organizing matter by moving bodies and applying their active qualities. De Koninck calls spontaneous generations an "improper term" because the spirit must apply heat or gravity or nuclear forces through cosmic bodies to organize the matter before it can become disposed for a new form. Although the powers of soul within the elements are ready to

¹²⁴ *The Cosmos*, 287. "Si nous réintégrons dans le cosmos l'activité spirituelle qui le travaille en son mouvement ascendant, nous ne suivons pas les anciens qui voyaient surgir partout des générations spontanées (terme impropre). C'est à la science expérimentale de déjà trouver où et dans quelles conditions surgit la vie" (*Le Cosmos*, 73).

take on a new form, this does not take place spontaneously. It happens only with the activity of the spirit in organizing the matter. Thus spiritual pressure is working on the cosmos in two ways. It organizes matter to dispose it for new forms and it gives matter the power to take on the form it is disposed for.

In a footnote, De Koninck explains what the seminal reasons of particular plants and animals must be that St. Augustine describes in his treatise on the six days of creation.

It is understood that there could not be in matter considered as in itself pure potency seminal reasons [for the intermediary forms] in the Augustinian sense. The three determining causes (final, exemplary and efficient) must be attached before we can speak of “reasons.” To speak absolutely, these reasons are rather in the intelligence of the spiritual agent who conceives more or less determinate prefigurations of the intermediary forms which, in this intelligence rise up from a synthesis of the initial composite given at the origin with the ultimate end of the cosmos which they are going to link. These prefigurations are cosmic ideas: “also corporeal forms are derived from spiritual substances, not however by infusing forms, but only by moving to forms. Further they are reduced to God, as to the first cause also of the species of the angelic intellect, which are certain seminal reasons of corporeal forms.”¹²⁵

According to De Koninck and St. Thomas, whom he quotes, God gives the spiritual agents or angels ideas of the species of natural beings which they cause to come to be in the cosmos by physically moving bodies and applying the qualities of some bodies to other bodies until the latter are adequately organized or disposed to take on the forms. The organized matter would not be able to take on the form, if it did not have, as well, the spiritual pressure from within as the “powers of soul.”

B. The Organic World: From Lower Forms of Life to Higher

Next De Koninck considers the ontological mechanism for the equivocal generations that lead lower forms of life to generate higher forms of life. De Koninck will address a number of

¹²⁵ *The Cosmos*, 349, footnote 96. “Il est entendu qu’il ne peut y avoir dans la matière pure puissance considérée en elle-même, des raisons séminales au sens augustinien. Il faut braquer sur elle les trois causes déterminantes (finale, exemplaire et efficiente) avant de pouvoir parler de “reasons.” À parler absolument, ces raisons sont plutôt dans l’intelligence de l’agent spirituel qui conçoit des préfigurations plus ou moins déterminées des formes intermédiaires lesquelles, en cette intelligence, jaillissent d’une synthèse du composé initial donné à l’origine avec la fin ultime du cosmos qu’elles vont relier. Ces préfigurations sont les idées cosmiques ‘[...] etiam formae corporales a substantiis spiritualibus deriventur, non tanquam influentibus formas, sed tanquam moventibus ad formas. Ulterius autem reducuntur in Deum, sicut in primam causam, etiam species angelici intellectus, quae sunt quaedam seminales rationes corporalium formarum.’” (*Le Cosmos*, 79, footnote 69; citing *ST I* 65.4).

questions as steps to answering this question. (1) Since both living and non-living things are composed of matter and form, what distinguishes the form of a living body from a non-living body? (2) What distinguishes a higher form of life from a lower form of life? (3) How do parents act as causes in normal reproduction or univocal generation? (d) How does equivocal generation, when a lower organism generates a higher organism, differ from univocal generation?

(1) What is Soul?

De Koninck defines what he means by *body* as a first step to defining the soul or principle of life in a living body. A difficulty arises from two uses of the term *body*: first, for the logical genus of body, second, for the material principle in an individual substance like a human being. The logical genus of body is only a being of reason. We understand a common nature among various beings. De Koninck speaks first of body as a nature. Rocks, giraffes, and oak trees and humans are all called *bodies* because they share a common nature. Each is an individual substance that is exterior to other bodily substances by a homogeneous or purely spatial opposition rather than by a difference of kind or heterogeneous opposition. One rock is here; another is there. One giraffe is inside the zoo; the other is outside the zoo.

Furthermore, there is also a spatial opposition between parts of one bodily substance like a giraffe. The giraffe's head is exterior to its neck and both are exterior to its tail. Bodies are extended part outside of part. Yet each of the parts belongs to the same substance. The substance is the root that integrates all the parts. A whole that is dispersed in this way is a body. Every part can also be called a body in an improper sense since it too is extended and can be divided. Each body can be measured quantitatively. The parts compared amongst each other define a magnitude. "In the philosophical sense, it [body] is a substantial whole which involves parts external to one another in a homogenous fashion."¹²⁶ Since rocks and lakes fit this definition of

¹²⁶ *The Cosmos*, 276. "Au sens philosophique le corps est un tout substantiel qui comporte des parties extérieures les unes aux autres de façon homogène" (*Le Cosmos*, 51).

body as well as dogs and men, there must be something else that distinguishes living bodies from non-living bodies. How can one account for the interiority that is life?

De Koninck says that the philosopher uses signs that manifest life to discern the principle of life. The philosopher does not need to remain “outside” like the scientist that limits himself to the external and measurable. The philosopher can understand sensation and other life activities by comparing them to his own lived experience of interiority. Clearly the experience of seeing shows that it depends on an organ, the eye, and less evidently on other inner organs like the optic nerve. When we close our eyes, we cannot see. Similarly we observe that we need our ears to hear and our tongue to taste, our legs to walk etc. The activities of life need certain organs to take place. For this reason, De Koninck, like Aristotle, distinguishes living bodies from non-living by the fact that they are “organized” bodies or have organs.

De Koninck follows Aristotle in defining the soul as “the act of an organized body.”¹²⁷ But the soul is not something in addition to the organized body that informs it and gives it something extra, namely, life. The soul informs prime matter, as does every substantial form. De Koninck is unambiguous on this point.

Soul—the substantial form of the living things—is the act of an organized body. Not that the substantial form informs an organized body. Form can only actualize prime matter. The organized body is rather the result of the informing. But then, why not say that the soul is a form such that when it actuates matter an organized body results?¹²⁸

Since the soul is the substantial form that gives the *prime matter* of a living being every actuality it has, De Koninck asks why obscure this by saying that the soul informs the *organized body* as do both Aristotle and St. Thomas. De Koninck answers that the phrase, “organized body,” in the definition is used of the prime matter looking back to what generation accomplished in matter, while the generator was preparing it, and ahead to what matter will become through being informed by the soul. Generation produces a determined matter as well as a determined form,

¹²⁷ *The Cosmos*, 277; *De Anima* II.1 (412b5).

¹²⁸ *The Cosmos*, 277. “L’âme – la forme substantielle du vivant – est l’acte d’un corps organisé. Non pas que la forme substantielle informe un corps organisé. La forme ne peut actuer que la matière première. Le corps organisé est plutôt résultat de l’information. Mais alors, pourquoi ne pas dire que l’âme est une forme telle que lorsqu’elle actue la matière, il en résulte un corps organisé?” (*Le Cosmos*, 54).

which together are the composite. The matter must be organized as gametes in a very specific way containing, virtually, as instrumental parts, the chromosomes, the cytoplasm, the DNA and other molecules and atoms in order to be apt to become an animal in generation.¹²⁹ After the generation has taken place, the form simultaneously comes to be and to be the cause of all the layers of actuality in the matter.

Thus, from the perspective of view of efficiency, the *disposition* of the matter conditions the form—the form can be act only of a matter disposed by the generator, a disposition of which, however, it is the cause in the order of formal causality.¹³⁰

What is proper to the soul is to be the substantial form of a particular kind of body, the organized body that will only come into existence in the instant of generation, but was being prepared by the generator.

(2) What distinguishes lower forms of life from higher forms of life?

As one observes organisms from those with the poorest life, like bacteria, to the organisms with a richer life, like oak trees, birds, and men, one can see a greater complexity of organization—more levels of organization, more organs, and more highly differentiated organs working together in a more complex way. The vital functions demand increasing complexity of organization and more pronounced heterogeneity. Living things require bodies with complex organs that are intricately interconnected in order to carry out the activities in which life consists. The richer the activities of life, the more heterogeneous the body becomes, distancing itself from pure corporality. This pure corporality, found in nonliving bodies like a lump of lead, is essentially homogenous with merely spatial exteriority. De Koninck concludes, “The living body is an organized body, and is that much more alive when it has a more differentiated

¹²⁹ For a penetrating discussion on the virtual presence of lower bodies in higher bodies, see Joseph Bobik, *Aquinas on Matter and Form and the Elements*, 120-126.

¹³⁰ *The Cosmos*, 278; emphasis in original. “Dès lors, dans la perspective de l’efficience, la *disposition* de la matière conditionne la forme – la forme ne peut être acte que d’une matière disposée par le générateur, disposition dont elle est cependant cause dans l’ordre de la causalité formelle” (*Le Cosmos*, 55).

organization.”¹³¹ The souls of higher living bodies are forms of more complexly organized bodies. The highly differentiated and interconnected organs permit the higher living things to perform more and higher sorts of activities.¹³²

(3) Reproduction: Univocal Generation

Just as we saw that spiritual pressure is needed for the origin of life and indeed for the motion of nonliving things, it is also needed for reproduction. However, there is a difference between univocal reproduction and the reproductive acts that result in higher mutated offspring in evolution. According to De Koninck, if offspring have higher powers than their generators, their generators are only instruments (although appropriate, “willing,” and in a certain sense self-moving instruments) and not principal agents of the generation; in univocal generation the generators are the principal (although not sufficient) agents of the generation.

In normal reproduction, parents communicate their own form. They generate offspring of the same species as themselves, i.e. with the same kind of soul. But how can plants or animals be the cause of a new soul? If the soul is something more than the organization of the parts but the principle of life and sensation, how can living bodies alter other bodies to cause such a principle of life? How can accidental changes cause a new substantial form and therefore new substantial being? De Koninck answers that they cannot be the cause of a new soul per se, but they cause a new composite like themselves to come to be, by disposing the matter, so that the new form can be drawn from it, because of the “powers of soul” in the elements. Whenever the matter has been made ready for a new form, God causes the new form. “The ultimate disposition is necessitating.”¹³³ Yet God does not do this by a separate action, but acts through the agent effecting the accidental changes in the composite about to be transformed. Accidental changes

¹³¹ *The Cosmos*, 277. “Le corps vivant est un *corps organisé*, et il est d’autant plus vivant qu’il comporte une organisation plus différenciée” (*Le Cosmos*, 53).

¹³² For a similar analysis of the correlation of organization and hierarchy, see Teilhard de Chardin, in *The Phenomenon of Man* trans. Bernard Wall (New York: Harper and Row Publishers, 1959), 60-61.

¹³³ *The Cosmos*, 289. “La disposition ultime est *nécessitante*.” (*Le Cosmos*, 76). *ST I-II* 113.7: “statim cum materia est disposita per alterationem praecedentem, forma substantialis acquiritur materiae,” cited in *The Cosmos*, 348, footnote 92; *Le Cosmos*, 76, footnote 65.

reverberate on the substantial level. Boiling a lobster is sufficient to cast out the soul. “That a disposition of the accidental order can have substance as its term should not astonish, since accidents are a function of substance. They are its instruments.”¹³⁴ God gives substances the power to act on other substances through their accidents in order to change the other substance’s accidents, but the accidents actually have the power to effect a change on the substantial level. No cosmic being is the first cause of a new substantial form, yet it can be a true secondary cause of a new substance coming to be, by the same spiritual power of a higher cause or causes (ultimately God) that causes motion in inorganic bodies and the origin of life.

De Koninck uses the phrase *educer* or *draw forth the form* rather than *communicate the form* even of univocal generation of organisms, reproduction of like from like, to emphasize that living things only communicate their form by forming matter. Their form does not reproduce itself directly by some spiritual emanation. An organism imprints its form on a part of itself, its sex cell or gamete, and releases that part to become matter for a new being. The gamete retains the specific form of the parent and has some kind of vegetative life, although it is no longer the life of the parent. The parent could die and the gamete would still have its vegetative life. The gametes unite and become an organism that possesses a soul of its own, by which it has complete animal life. Thus there is a continuity of life from parent to gamete to offspring, although not the same individual life; there is also continuity of specific form, although not the same individual instance of the form. Plants and animals are true causes of generation. They are the cause of the whole effect as secondary causes. God does not do something separately, *i.e., infuse the form spiritually* (except in the case of human generation), to effect the generation. Therefore, the parent organisms are really *principal causes* of the change and not just *occasions* of the change. God does not do anything more to the matter than what He effects through the parents. In this, the parents are something like the chisel of a sculptor since the sculptor does not impart anything to

¹³⁴ *The Cosmos*, 280. “Qu’une disposition d’ordre accidentel puisse avoir la substance comme terme ne doit pas étonner, puisque les accidents sont fonction de la substance, qu’ils en sont les instruments” (*Le Cosmos*, 60).

the stone that he does not give through the chisel. However, animal generators are also different from the chisel; they are not instruments in relation to their offspring because they actually possess the *form* that they communicate; they do not only possess the *motions* whereby another agent communicates the form that he possesses. Parents are only instrumental causes, or moved movers, in relation to a more universal cause, whether there be one or many.

(4) Generation of Mutated Offspring: Equivocal Generation

In the equivocal generations of evolution, the proximate agent generates something of another species, higher than itself. It is not the principal or proper cause of its progeny; it does not communicate its own form. It is merely an instrument of a more universal agent, which is of a higher genus than what is generated. A nonliving thing could never generate life; a lower organism could never generate a higher. Nothing can give what it does not have. “The principal cause of cosmic life and of its rising line is neither of the same species nor of the same natural genus, but it is nevertheless a living being.”¹³⁵ De Koninck is claiming that the primary (transcendent) cause of the evolution of living things is something alive, either an angel and God or God directly.

The generators of mutated offspring communicate life or even sentient life but not the formal level of life of their offspring. They are instrumental causes in relation to their progeny because they do not possess the form that they communicate. They are like the apprentices in the workshop of an artist. They possess the form imperfectly and so the master who possesses the form perfectly must complete their work. The spiritual agent uses the living things as instruments to propagate something higher. For example, an angel might use radiation to mutate an organism’s gametes so that the parent generates, by its natural action of generation, offspring possessing a different form from the parents. The generators are not fully proportionate to what they generate. They do not possess the specific form that they generate; nor do they act for the

¹³⁵ *The Cosmos*, 287. “La cause principale de la vie cosmique et de son élan ascendant n’est ni de la même espèce, ni du même genre naturel, c’est néanmoins un être vivant” (*Le Cosmos*, 73).

natural proportionate end of their activity, the reproduction of their own species. The parents of mutated offspring possess the form only as inadequate instruments (like a painter's apprentices). The parents could not have given the form to their gametes without some other cause completing the form in one of the parent's gamete. The master painter added the features of the face to the painting.

(5) The Ontological Status of Accidents in Generation

In every kind of substantial change, including both normal reproduction and evolutionary generations, De Koninck sees a sculpting of the new composite, by the generator or generators. "The generator is truly an efficient cause of the engendered, he models it in advance, and gives it independent existence."¹³⁶ De Koninck insists that natural things are true causes of generations, both univocal and equivocal because the generations come about by the altering of bodies. Nevertheless, he wants to insist that there is true novelty. This novelty does not consist merely in a new group of atoms with a new organization of parts. There is generation both of new individuals of the same species and of higher species. Once the new substantial form is drawn forth, it becomes the formal cause of all the accidents of the matter. Parents produce the egg and sperm, sculpting their accidents, and then causing them to unite to form a zygote for there to be matter prepared to receive the substantial form or soul of an animal. Once the new animal is generated, however, everything about it is new.

When the chromosomes of a spermatozoid (envisaged here as signs) are united to those of the ovulum and a new being is born, the spermatozoid and the ovulum are corrupted—even if the chromosomes of the new being are the same from the experimental point of view, and one has followed them on the track to their new ensemble.¹³⁷

De Koninck describes what happens ontologically in reproduction. He says that the sperm and egg unite to form matter that is properly disposed to become an animal like the parents. "Matter is

¹³⁶ *The Cosmos*, 282. "Le générateur est vraiment cause efficiente de l'engendré, il le modèle d'avance, et lui donne l'être indépendant" (*Le Cosmos*, 63).

¹³⁷ *The Cosmos*, 279. "Lorsque les chromosomes du spermatozoïde (envisagés ici comme signes) s'unissent à ceux de l'ovule, et qu'un être nouveau est né, le spermatozoïde – même si les chromosomes du nouvel être sont les mêmes au point de vue expérimental, et qu'on les a suivis à la trace jusqu'en leur nouvel ensemble" (*Le Cosmos*, 57).

the potency of *this* composite, and in this respect, this composite measures its potency for the composite to be engendered.”¹³⁸ The first composite is not annihilated; rather all the actuality that was present in the beginning term is preserved virtually in the end term.

When the dog sperm and ovum unite, they are “reduced to the potency of matter”¹³⁹ and a new being, the dog, comes to be. When the dog dies, it is again reduced to the potency of matter and new composites are generated. Each generation is simultaneous with a corruption to the potency of matter, but the matter never exists *in between* as pure potency with no disposition.

According to De Koninck, even though there seems to be a continuity between accidents in the prior substance or substances and the new substance, every single accident or part in the new substance is different in *number* than the similar looking accident or part in the old substance. The chromosomes in the zygote are different beings from the chromosomes in the sperm and ovum even though they look the same. Scientists could in principle follow the chromosomes’ paths in the event of fertilization and indicate which chromosomes came from the mother and which from the father. Yet, De Koninck claims that all the chromosomes in the new animal are different *beings* from the matching chromosomes of the gametes. This is a scandalous claim. How could the chromosome tracked from the gametes to the embryo be different beings in the embryo? Why would they look identical? De Koninck makes the same claim for atoms in a man and a corpse. How could an atom of oxygen in the human body be a different being from an atom of oxygen in the same place in the corpse if it is not the same atom? The answer has to do with what gives the chromosomes or atoms being. Substance is the root of accidents and parts. They depend on it for their being. The white of Socrates’ skin is a different being (to the limited extent that an accident has being) than the white of Plato’s skin because Socrates and Plato are different substantial beings. The substance underlies and gives being to its accidents. In a similar way, the

¹³⁸ *The Cosmos*, 279. “La matière est la puissance de *ce* composé, et sous ce rapport, ce composé mesure sa puissance pour le composé à engendrer” (*Le Cosmos*, 57).

¹³⁹ *The Cosmos*, 279. “réduit à la puissance de la matière” (*Le Cosmos*, 57).

chromosome first exists by the power of the soul of the parent, then by the power of the soul of the gametes; now it exists by the power of the new substantial form or soul of the puppy.¹⁴⁰

Generations result in altogether new beings with new souls and new accidents, even though the offspring receive all that they have from their generators and the spiritual agent, which works providentially in the cosmos. De Koninck insists on this point to distinguish his doctrine from the doctrine of materialists say that there is no real novelty in the world or new substantial beings, but only new arrangements of atoms or particles. For them, new functions like thinking are mere epiphenomena of the new organizations.¹⁴¹

C. From Animal to Man

Although De Koninck has argued that the process of evolution is for the sake of bringing forth man, he says that it is, more proximately, for the sake of bringing forth a body suitably disposed for the human soul. Even though our soul is an immortal spirit, it cannot do anything naturally without the body. It is born empty.

Empty of every object, even empty of itself since it cannot not know itself save in knowing an object distinct from itself, it must seek gropingly its object outside; which supposes both homogeneous exteriority (that is, corporeity) and passive experience in the knowing subject.¹⁴²

The soul can only perform the spiritual activities of knowing and willing after sensing other bodies through the eyes and ears of the body it informs. Only by his contact with other bodies can

¹⁴⁰ Joseph Bobik has some enlightening things to say about the way lower bodies both remain in one way and do not remain in another way in higher bodies. They become parts or conjoined instruments of the higher body, like the heart in a human body: "Whereas a mixed body [or compound], like any corporeal substance, can have *actually* only one substantial form, its own; *potentially*, nonetheless, it *can* have—indeed *must* have—at least as many substantial forms, in number and in kind, as the elements which are required as its ingredients.... To say that the mixed body *could not act* without a certain number of elements (and atoms and molecules) is to say that it depends on their instrumental presence through which it performs its proper activities" (*Aquinas on Matter*, 140).

¹⁴¹ For example, popular science writer Diane Ackerman disposes of human consciousness in a few words, "A self is a powerful sleight of mind arising from 100 billion neurons communing at 100 trillion synaptic bridges." Or more tersely, "A self is a mirage." Diane Ackerman, *An Alchemy of the Mind: The Marvel and Mystery of the Brain* (New York: Scribner, 2004), 121 and 122.

¹⁴² *The Cosmos*, 288. "Vide de tout objet, voire vide d'elle-même puisqu'elle ne peut se connaître sans connaître un objet distinct d'elle, il lui faudra chercher à tâtons son objet au dehors; ce qui suppose à la fois extériorité homogène (c'est-à-dire corporéité) et expérience passive dans le sujet connaissant" (*Le Cosmos*, 73).

man come to know himself in his act of knowing other things. “The body is like an instrument that enables the spirit to exercise its proper activities.”¹⁴³

However, De Koninck notes, not any kind of body can be the instrument of the human soul. Prime matter must first be suitably disposed to receive the human form. “It is this immediate disposition that the whole of nature brings about under the spiritual pressure exercised on it according to the laws of nature.”¹⁴⁴ If the initial matter at the beginning of creation had been suitably disposed, it would have immediately become man, “since the ultimate disposition is necessitating.”¹⁴⁵ There would have been no evolution. Instead, from the evidence of the fossils, we can infer that prime matter was first disposed to inorganic matter, then to vegetative life, then to primitive animal life, then to more and more complex sensitive life until finally a body was suitably disposed for rational life.

The soul can be the form only of a particularly disposed matter. This disposition is realized in an inchoative fashion to the degree that one goes up the scale of plants and animals. The soul does not inform a matter disposed only to vegetative life, the matter must be disposed to the life of knowledge, to be subject of an intellectual form. If matter were itself immediately disposed, all human forms would be realized right away since the ultimate disposition is *necessitating*. It is moreover contradictory, both on the side of matter, pure potency, and from the side of “all the possible human forms” that are impossible.¹⁴⁶

De Koninck says that “the ultimate form is necessitating,” because God creates natures to be truly natures, real principles of motion. God doesn’t pick and choose when He draws forth a substantial form. As we saw already in the discussion of univocal generation, whenever the natural causes have altered matter sufficiently to receive a new form, God brings it forth, by the reverberations of those alterations. De Koninck claims that if prime matter did not need to acquire

¹⁴³ *The Cosmos*, 288. “Le corps est comme un instrument qui permet à l’esprit d’exercer ses activités propres” (*Le Cosmos*, 74).

¹⁴⁴ *The Cosmos*, 288. “C’est à cette disposition immédiate que travaille la nature entière sous la pression spirituelle exercée sur elle selon les lois de la nature” (*Le Cosmos*, 75).

¹⁴⁵ *The Cosmos*, 289. “Puisque la disposition ultime est *nécessitante*” (*Le Cosmos*, 76).

¹⁴⁶ *Cosmos* 288-289. Translation modified. “L’âme ne peut être forme que d’une matière particulièrement disposée. Cette disposition est réalisée de façon inchoative à mesure qu’on s’élève dans l’échelle des plantes et des animaux. L’âme n’informe pas une matière disposée à la vie végétative seulement, il faut que la matière soit disposée à la vie de connaissance, voire, à être sujet d’une forme intellectuelle. Si la matière était d’elle-même immédiatement disposée, toutes les formes humaines possibles seraient du coup réalisées, puisque la disposition ultime est *nécessitante*” (*Le Cosmos*, 76-77).

a particular disposition to receive the human form, then it would become all men as soon as it was created. It must do so because it is drawn more strongly to its ultimate end, the human form, than to any other form. But this is impossible since there is an infinite or indefinite number of possible human beings and an indefinite number can never be realized. Furthermore, prime matter would no longer be pure potency. It would not be potency to plant or animal forms because it would necessarily attain its goal of the human form immediately upon creation.

(1) *Embryological Development a Sketch of Evolution*

De Koninck suggests that it is fitting for there to be an evolutionary development of the cosmos in time, just as there is an evolutionary development of the human embryo in time. He refers to another passage from St. Thomas about embryogenesis.

We see no difficulty in the fact that intermediary forms are produced to disappear so soon after, because, not belonging to any determinate species, they are simple transitions which lead to the determinate species; consequently they do not receive existence in order to keep it, but only in order that by them the being which is the ultimate end of generation can be realized. One should not wonder at seeing that the same transformation does not continue during the time of the generation, but that there is a certain number of intermediate generations; for that is equally the case with alteration and growth, and Aristotle shows us that the only motion that is really continuous is local motion.

Therefore the number of intermediate forms, which gradually prepare for the ultimate form, and consequently the number of intermediary generations, is in proportion to the nobility of the form and of the distance that separates it from elementary form. That is why, when generation has for term animal and man, whose form is more perfect, there are many intermediate forms and generations and, consequently, corruptions, since the actual form is produced only by the destruction of the preceding one. Therefore the vegetative soul, which first gives the embryo the life of a plant, is destroyed after a period of time and gives place to a more perfect form, which is both nutritive and sensitive. The embryo lives then with animal life, and when the latter is in its turn destroyed, it is replaced by a rational soul, which comes from without, although the two others have existed in virtue of an active principle inherent in the sperm.¹⁴⁷

¹⁴⁷ *SCG* II 89.10-11: “Nec est inconueniens si aliquid intermediorum generatur et statim postmodum interrumpitur: quia intermedia non habent speciem completam, sed sunt ut in via ad speciem; et ideo non generantur ut permaneant, sed ut per ea ad ultimum generatum perveniatur. Nec est mirum si tota generationis transmutatio non est continua, sed sunt multae generationes intermediae: quia hoc etiam accedit in alteratione et augmento; non enim est tota alteratio continua, neque totum augmentum, sed solum motus localis est vere continuus, ut patet in VIII physicorum.

“Quanto igitur aliqua forma est nobilior et magis distans a forma elementi, tanto oportet esse plures formas intermedias, quibus gradatim ad formam ultimam veniatur, et per consequens plures generationes medias. Et ideo in generatione animalis et hominis in quibus est forma perfectissima, sunt plurimae formae et generationes intermediae, et per consequens corruptiones, quia generatio unius est corruptio alterius. Anima igitur vegetabilis, quae primo inest, cum embryo vivit vita plantae, corrumpitur, et succedit anima perfectior, quae est nutritiva et sensitiva simul, et tunc embryo vivit vita animalis; hac autem corrupta,

St. Thomas believes that the embryo goes through a series of substantial changes between fertilization and birth. He thinks that it is first informed by a vegetative soul, then a sensitive soul, and finally a rational soul. There are gradual material changes that lead to abrupt ontological changes ending with a human being. St. Thomas believes this because he understands that the form can only be the form of a properly disposed body. Any form cannot inform any kind of body. The human form, for example, requires the senses, the nervous system, and the brain in order to perform rational activity. Therefore, he believes that the human soul cannot be infused until the embryo has these organs.

When De Koninck comments on this passage from St. Thomas, he seems to reject the doctrine that the human embryo has a series of souls informing it during development. However, he does see the passage corresponding well to his own doctrine of evolution.

It must indeed be granted that evolution follows the general lines sketched by St. Thomas in his doctrine on the evolution of the human embryo—the particular application of the doctrine we have abandoned, but it incontestably holds for the entire cosmic evolution.¹⁴⁸

One can plausibly understand the statement, “the particular application of the doctrine we have abandoned” as abandoning the series of souls in the human embryo. De Koninck follows these words by citing the passage just cited from St. Thomas that begins with this sentence.

We see no difficulty in the fact that intermediary forms are produced to disappear so soon after, because, not belonging to any determinate species, they are simple transitions which lead to the determinate species; consequently they do not receive existence in order to keep it, but only in order that by them the being which is the ultimate end of generation can be realized.¹⁴⁹

St. Thomas says that the intermediate forms of the embryo do not belong to a determinate species because they are transitional beings. When the fetus has a plant soul, it is not a geranium or a

succedit anima rationalis ab extrinseco immissa, licet praecedentes fuerint virtute seminis;” *The Cosmos*, 289; *Le Cosmos*, 76-77.

¹⁴⁸ *The Cosmos*, 289. “Il faut bien admettre que l’évolution suit les lignes générales esquissées par saint Thomas dans sa doctrine sur l’évolution de l’embryon humain – doctrine dont nous avons abandonné cette application particulière, mais qui vaut incontestablement pour l’évolution cosmique tout entière” (*Le Cosmos*, 76).

¹⁴⁹ *SCG* II 89.10-11: “Nec est inconueniens si aliquid intermediorum generatur et statim postmodum interrumpitur: quia intermedia non habent speciem completam, sed sunt ut in via ad speciem; et ideo non generantur ut permaneant, sed ut per ea ad ultimum generatum perveniatur;” cited in *The Cosmos*, 289; *Le Cosmos*, 76.

mushroom; it is not a determinate species of plant, but an on-the-way-to-being-human transitional substance. De Koninck likens the intermediate forms of the embryo, referred to by St. Thomas in this passage, to the intermediate forms of life in the ascending process of evolution.¹⁵⁰ They are more on-the-way-to-being-human transitional substances than determinate substances in their own right.¹⁵¹ He sees the transitory existence of evolving organisms as a fitting sign of their essential usefulness; it makes sense that the vast majority of plant and animal species along the path of evolution become extinct along the way.

Let us unpack the rest of the passage from St. Thomas. The development of the embryo is *natural*; it is an activity stemming from powers *within the embryo* towards a determinate end. Therefore there must be some inner tendency, or urge moving the embryo to develop from the first fertilized cell, the zygote, into a perfected human baby. Similarly, De Koninck sees all matter having *a natural urge or desire for becoming man*. Again, it is not that De Koninck thinks matter has an activity of desiring; rather it is simply potency, which is nothing other than the relation to the act that will fulfill it.¹⁵² De Koninck believes this tendency leads to a natural evolutionary development toward this determinate natural end. There are, as in fetal development, gradual material changes in the mutated progeny, generation after generation, until a body is made ready for a specifically new substantial form or soul. Then there is abrupt ontological change.

¹⁵⁰ Although De Koninck sees an analogy between evolution and fetal development, he does not accept the succession of souls in fetal development. He sees a unity due to one substantial form throughout fetal development, unlike in evolution, as well as the unity of material and final cause. Thus, for De Koninck, embryonic development consists in one organism growing and changing its physical form or shape over time without changing its substantial form and becoming a new substance. De Koninck considers the zygote, with its unique genes, already a sufficiently disposed body to be the subject of a human soul. *The Cosmos*, 289 ; *Le Cosmos*, 76.

¹⁵¹ Lawrence Dewan notes the changeable character of cosmic beings for De Koninck: “Fr. Owens conceives of the substantial being of movable things as intrinsically a “flux,” ignoring the *per accidens* aspect of such being’s being measured by time. Charles De Koninck strikes me as tending in this same direction,” Dewan, *Form and Being*, 113.

¹⁵² De Koninck quotes St. Thomas on the desire of matter for form: “The appetite for form is not some action of matter, but a certain relation of matter to form according as it is in potency to it.” “Appetitus formae non est aliqua actio materiae sed quaedam habitudo materiae ad formam, secundum quod est in potentia ad ipsam” (*de Potentia*, 4.1 ad s.c. 2); cited in *The Cosmos*, 336, footnote 33; *Le Cosmos*, 34, footnote 5.

Thus, according to De Koninck, evolutionary development takes place between two extremes: the first composite or composites created “in the beginning” and the goal, man. Every natural being in between is linked to each of these extremes by matter and by historical origin and destiny. “All intermediary forms bear profound traces of these extremes, as the arms of a statue bear the trace of the chisel, and of the ensemble of which it is part.”¹⁵³ What *can become* always depends on what *came before* since the matter must be disposed suitably for a new form. What *can become* also depends on the goal since there is a tendency or aspiration directing this process, which “desires” to arrive at the form of man. Not every possibility would lead in the right direction. There is an ascending movement that needs to pass through certain steps to reach man.

Primate to Man

De Koninck asks what the penultimate product of evolution was. What animal was the immediate forerunner of humans?

What now was this animal whose elevation to the necessitating disposition by way of alteration calls *naturally* for the creation of the soul? It is for experimental science to tell us. And if man and the ape have, in this respect, a common ancestor, how would that detract from human dignity? Why prefer that he came from the mud? A preference somewhat lugubrious from an ontological point of view, a perverse manner of falling into nonsense, for is it not a sin of angelism for man to deny his humble origins and to wish to have been given right off like a pure spirit? Is it not rather his glory to be the goal of these immense efforts of the world, prodigious and concentrated with an eye to his arrival?¹⁵⁴

De Koninck does not speculate more about what animal immediately preceded man. He says that it is for experimental science to discover. De Koninck remarks that whatever the identity of the pre-human animal, it was certainly ontologically higher than mud. Distaste for such ancestry shows a lack of appreciation for the hierarchy of being; it also shows the desire to be a higher kind of being, one created directly from nothing, such as an angel, rather than an animal. But the

¹⁵³ *The Cosmos*, 284.

¹⁵⁴ *The Cosmos*, 292. “Quel fut maintenant l’animal dont l’élévation à la disposition nécessitante par voie d’altération appela *naturellement* la création de l’âme? C’est encore à la science expérimentale de nous le dire. Et si l’homme et le singe ont, sous ce rapport, un ancêtre commun, pourquoi serait-ce contre la dignité de l’homme? Pourquoi préfère-t-on le voir sortir de la boue? Préférence, au point de vue ontologique, plutôt lugubre; manière perverse de retomber dans la bêtise: car n’est-ce pas un péché d’angélisme pour l’homme que de nier ses humbles origines, et de vouloir être donné d’emblée comme un esprit pur? Et n’est-ce pas plutôt à sa gloire que d’être le but de ces immenses efforts du monde, prodigués et concentrés en vue de son avènement?” (*Le Cosmos*, 82).

peculiar place of man is to be the link between matter and spirit, the inferior creature, upon whom God lavishes mercy. We are not spirits, created in one instant (with a body tacked on). We are animals, although rational ones. As animals, we are bodies and the genesis of our bodies has enormous consequences for our spirits. Our temperaments and tendencies to certain virtues or vices, even our level of intelligence and strength of will are all connected to the dispositions of our bodies. It is this animal nature, this materiality, this almost nothingness that makes God's descent in the Incarnation so merciful.

(2) Infusion of the Human Soul

The penultimate animal generates through the power of the spiritual agent and its own natural powers that which is to become a human body; it cannot, however, actually produce a human body: "Since God alone can create the human soul, He alone can make the human body."¹⁵⁵

If one understands the human body in the strict sense, as that which is formally constituted by the spiritual form immediately created by God which responds to the ultimate necessitating disposition, it is absolutely impossible that the body was produced by evolution... But if by "to make a human body" we mean all the preparatory and dispositive work preceding in time its formal constitution, one must indeed say that evolution fashioned it, and that it is in this very formation that evolution consists.¹⁵⁶

Nature, through the process of evolution and the power of the spiritual agent, brings forth the body that is prepared to become a human body at the instant of the infusion of the soul. It has the ultimate necessitating disposition that God has decreed to complete by infusing the soul, thereby making the body a human body.

De Koninck insists, however, that the soul does not come from outside the cosmos, like a heavenly stamp on an envelope that was prepared from within the cosmos by evolution.

The language in which we express the infusion of the spiritual soul—do we not say that it *comes*

¹⁵⁵ *The Cosmos*, 290-291. "Puisque Dieu seul peut créer l'âme humaine, Lui seul peut faire le corps humain" (*Le Cosmos*, 79).

¹⁵⁶ *The Cosmos*, 290-291. "si l'on prend le corps humain au sens strict, comme ce qui est formellement constitué par la forme spirituelle, immédiatement créée par Dieu qui répond à l'ultime disposition nécessitante, *il est absolument impossible que ce corps fut produit par évolution*... Mais si par à faire un corps humain à nous entendons tout le travail préparatoire et dispositif, précédant dans le temps sa constitution formelle, il faut bien dire que l'évolution le façonna, et que c'est dans cette formation même que consiste l'évolution" (*Le Cosmos*, 79-80).

to disposed matter?—gives rise to images that can falsify the idea. Is it not strange that the term toward which the entire cosmos tends should come to matter, and that the latter should *receive* this form from without? As if the Creator applied a form to matter in the same way that a stamp is to a properly addressed envelope? It is important to note that God does not act *on* things, but from *within*. Proceeding immediately from the Creator, the emanation of the spiritual soul is by that very fact more intimate, it comes more from within than the forms extracted from the potency of matter and which mark out the road to an emanation so profound that it must come immediately from the Universal Cause. In this perspective, it is rather material forms that come to and are from without.¹⁵⁷

This passage calls to mind St Augustine's famous words, "tu autem eras interior intimo meo."¹⁵⁸

De Koninck corrects the false image of a deistic evolution where the great machine of nature rolls along on its own, successfully bringing forth the almost-human, which just needs the divine intervention at the end to complete it. For a Catholic deist, God creates and adds a human soul to the body nature has produced. Rather, De Koninck says, God is within the whole process giving existence to every natural being and its activities from within. The most intimately interior moment of the cosmic process is the bringing forth of the human soul from within matter. De Koninck does not deny that the human soul is immaterial and therefore must be created from nothing. However, since God is within every creature and indeed is more deeply within each creature than the creature's own essence or existence, what is immediately created by God, the human soul, comes more deeply from within a body than material forms that are generated by an exterior material agent changing a body.

(3) *An Objection: Why Doesn't Evolution from Primate to Man Continue Today?*

De Koninck raises an objection. If a spiritual agent is responsible for the evolutionary development leading to man, and it is a more perfect cause than human generators, why don't we

¹⁵⁷ *The Cosmos*, 295. "Le langage en lequel nous exprimons l'infusion de l'âme spirituelle – ne disons-nous pas qu'elle *advient* à la matière disposée? – donne lieu à des images qui pourraient fausser l'idée. N'est-il pas étrange que le terme vers lequel est tendu le cosmos tout entier doive advenir à la matière, et que celle-ci doive *recevoir* cette forme du dehors? Comme si le Créateur appliquait à la matière une forme de même qu'on colle un timbre sur une enveloppe dûment adressée. Or il importe de remarquer que Dieu n'agit pas *sur* les choses, mais *au-dedans*. Procédant immédiatement du Créateur, l'émanation de l'âme spirituelle est par là plus intime, elle vient davantage du dedans que telle des formes extraites de la puissance de la matière et qui extrinsèquement frayent le chemin à une émanation si profonde qu'elle doive sortir immédiatement de la Cause Universelle. Dans cette perspective, ce sont plutôt les formes matérielles qui adviennent et qui sont au dehors" (*Le Cosmos*, 85).

¹⁵⁸ St. Augustine, *The Confessions* III, 6: "But you were more inward than my innermost."

see humans evolving from primates now? Why don't human beings show up everywhere without human progenitors?

De Koninck answers that when man and woman generate a child, they are a sufficient natural cause (when moved by the universal cause) to dispose the matter for the human soul. As soon as a sufficient univocal cause exists, God honors it by allowing it to produce its effect.

Thus from the moment there exists a sufficient univocal cause, equivocal causality becomes, in this precise respect and in virtue of ontological economy superfluous. In other words, *if all humanity could have its origin in a unique first individual, the contrary hypothesis is entirely gratuitous*. The constitution of this univocal cause is precisely the end of this impulse. Just as God manifests His power by creating effects which are causes in their turn, which spreading themselves out, thus imitating on another level, diffusive and creative goodness, so this equivocal causality attains its maximum when it succeeds in producing an effect which from then on is an independent cause.¹⁵⁹

Since the ontological leaps can only take place through the spiritual pressure of the equivocal cause exercising its providential direction of the world, they will not take place unless the equivocal cause intends it. The cosmic spirit will not move natural things to affect gametes in prehumans again so that they are correctly disposed to become a human body when they unite. Once the goal, the first human, has been reached, the equivocal cause will not bring forth further humans *by evolution* but only by *human generation* since humans are the proper causes of humans.

It can be seen that creationism is a disguised revival of the ancient doctrine of those who rob natures of their proper actions, a doctrine vigorously opposed by St. Thomas, and which suppresses the divine governance by way of secondary causes. God can make the works of nature better than nature herself. The activity of pure spirits is already infinitely more efficacious than that of natural beings. Should one conclude from that that it is worthier of these causes to remove from their effects all activity of their own?¹⁶⁰

¹⁵⁹ *The Cosmos*, 290. "Dès lors, du moment qu'il existe une cause univoque suffisante, la causalité équivoque devient, sous ce rapport précis, et en vertu d'une économie ontologique, superflue. En d'autres termes, *si l'humanité entière peut avoir son origine dans un premier individu unique, l'hypothèse contraire est absolument gratuite*. La constitution de cette cause univoque est précisément la fin de cette impulsion: De même que Dieu manifeste sa puissance en créant des effets qui sont causes à leur tour, qui se répandent au dehors, imitant ainsi sur un autre plan la bonté diffusive et créatrice, de même cette causalité équivoque atteint son maximum lorsqu'elle réussit à produire un effet désormais cause indépendante" (*Le Cosmos*, 78).

¹⁶⁰ *The Cosmos*, 290. "On le voit, le créationnisme est une rénovation déguisée de l'ancienne doctrine de "ceux qui privent les êtres de la nature de leurs propres actions," doctrine si vigoureusement combattue par saint Thomas, et qui supprime le gouvernement divin par causes secondes. Dieu sait mieux faire les œuvres de la nature que la nature elle-même. Déjà l'activité des esprits purs est infiniment plus efficace que

De Koninck vigorously opposes those who argue against evolution by saying that if it happened once, we should see it happening everywhere. God wills to bring about effects through the causality of creatures, hence it is not to be expected that He should continue to bring about human beings by evolution after the first humans evolve. God wishes to communicate a share in His goodness not only by bestowing existence on creatures but also by bestowing causality. The greater the causality He bestows on them, the greater glory they give Him because they reflect His perfection better. Humans should be permitted to be the sole generators of humans once they exist.

(4) Will Humans Evolve Further?

Once the first man appeared through the combined causality of God and nature, did all evolutionary processes stop? Certainly, there would be no further human beings evolving from beasts after the first man and woman, according to De Koninck. Would there be any other sort of evolution taking place within the human race? As we have already seen, De Koninck argues repeatedly that man is the final goal of nature; therefore humans are not going to evolve into another species. “Man is manifestly the *raison d’être* of the whole of nature.”¹⁶¹ However, there are a few passages where De Koninck talks about development of the human race. He wrote two very brief passages in *The Cosmos* about the evolution within the human race, as well as a few longer ones in his *Course Notes on Nietzsche*, now available on the website of the Charles De Koninck Project.

Moreover, evolution which continues in humanity has taken on a different color. It no longer proceeds by essential jumps. We find ourselves from now on a spiritual plane where plasticity is infinitely greater within the same essential degree. There rises now a quite new type of hierarchization, more profound, more essential. At a subhuman level the world could only enrich and hierarchize itself thanks to essential ruptures of equilibrium, thanks to violent changes, like those of an apprentice swimmer who has to make a noisy display of effort barely to keep afloat,

celle des êtres naturels. Faut-il en déduire qu’il est plus digne de ces causes de soustraire à leurs effets toute activité propre?” (*Le Cosmos*, 78).

¹⁶¹ *The Cosmos*, 264. “L’homme est manifestement la *raison d’être* de la nature entière” (*Le Cosmos*, 35).

whereas the expert swimmer advances rapidly by executing graceful movements.¹⁶²

There will be no more essential leaps; according to De Koninck, man is the destined goal of nature. However, there will be a spiritual development that will lead to a hierarchy among men. Usually the members of a hierarchy exist at the same time, the hierarchy that De Koninck is speaking of, however, seems to be of wise men and artistic geniuses who lived at different times in history. Perhaps, he is thinking of a hierarchy in the historical memory and stored wisdom and artistic treasures of the human race. In his *Course Notes on Nietzsche*, he mentions developing waves of philosophers: first, Socrates, Plato, and Aristotle; second, Plotinus, St. Augustine, and Dionysius; and a third wave of St. Thomas.

It seems to us that the historical evolution of philosophy describes a series of statistical curves; or, if you will, a series of waves. If we take as limits of the systems the most salient, the most elevated summit that has been attained in antiquity is represented by Socrates, Plato, and Aristotle. The following summit was attained by another trinity several centuries later by Plotinus, St. Augustine, and the Areopagite. The third by St. Thomas in the Middle Ages.¹⁶³

De Koninck is pointing to the development of philosophy made possible by wise men teaching disciples, who are able to go further than their masters. He points to a similar development in music from Beethoven to Wagner to Stravinsky.¹⁶⁴ According to De Koninck's judgment, there is ascension in wise men and musical genius, building on the accomplishments of those who went before. Clearly, this kind of development (if and when it exists) is very different from biological development of new species. Only humans, because of their rationality and the various ways they have found to preserve their intellectual and artistic discoveries, are capable of this sort of

¹⁶² *The Cosmos*, 254-255. "Cependant, l'évolution qui se poursuit dans l'humanité a pris une autre allure. Elle ne procède plus par bonds essentiels. Nous trouvons désormais sur un plan spirituel où la plasticité est infiniment plus grande à l'intérieur d'un même degré essentiel. Il s'échelonne ici un genre tout nouveau de hiérarchisation, plus profond, tout en n'étant plus essentiel. À son stade infrahumain le monde ne pouvait s'enrichir et se hiérarchiser que grâce à des ruptures d'équilibre essentielles, grâce à des mouvements violents, comme ceux d'un apprenti nageur qui doit faire un tapageux étalage de force pour flotter à peine, alors que le nageur expert avance rapidement tout en exécutant des mouvements gracieux" (*Le Cosmos*, 22-23).

¹⁶³ *Course Notes on Course sur Nietzsche*. "Il nous semble que l'évolution historique de la phil[osophie] décrit une série de courbes statistiques ou, si vous voulez, une série d'ondes.

Si nous prenons comme limites les systèmes les plus saillants, le sommet le plus élevé qu'on ait atteint dans l'antiquité est représenté par Socrate, Platon, et Aristote le sommet suivant est atteint par un autre trinité plusieurs siècle plus tard par Plotin, St Augustin, et l'Aréopagite, le troisième par S Thomas, au moyen âge." (*Course sur Nietzsche*, Lecture 1, p.21).

¹⁶⁴ *Course Notes on Nietzsche*. (*Course sur Nietzsche*, Lecture 1, p.20).

development. It should be noted that human development of this kind is fragile, because it is not preserved in genes and passed on by natural generation. It may be partially preserved in artifacts, but unless it is also preserved in the minds and hearts of men such developments wither. Only living men with living culture can develop it and pass it on to the next generation. Many moral factors, which De Koninck does not mention in *The Cosmos*, must come into play.

De Koninck also writes of ascension in cultural levels:

Tragedy is essential to cosmic life. The desire to reach man (and in humanity the desire to attain always *higher cultural levels*) knows no pity. To the degree that life becomes more noble and more intense in organization, death becomes more terrible and takes on the most frightening proportions.¹⁶⁵

“Tragedy is essential to life,” De Koninck says, because life nourishes itself on life. Animals feed on plants; humans feed on plants and animals. Something must die or be corrupted in order for something new to be generated. In evolution, when one species generates a new species, the parent or parents give up preserving their own specific life. One species dies to make room for a new species. Even natural reproduction is bringing forth one’s replacement. Human parents write wills and buy life insurance to provide for their children when they die. The nobler the life, the more terrible is the death. A human’s death, even though anticipated and even called for by procreation, is as much more terrible than a dog’s death as human nature with its capacity for God is nobler than canine nature.

In cultural development too, according to De Koninck, one culture must give way for a new culture to be born. The hunting and gathering culture died to make room for the agricultural culture; medieval culture died when the Renaissance took its place; the Industrial Revolution eliminated the small farms and landed nobility of English culture. The Baroque additions to Gothic churches as well as the modernization of many churches today show physically, frozen in architecture, the death of one culture to make room for another. De Koninck seems to find this

¹⁶⁵ *The Cosmos*, 301; emphasis added. “Le tragique est essentiel à la vie cosmique. Le désir d’en arriver à l’homme (et dans l’humanité le désir d’atteindre des niveaux culturels toujours plus élevés) ne connaît pas la pitié. À mesure que la vie devient plus noble et plus intense en organisation, la mort devient plus terrible, et la crainte de la mort prend des proportions de plus en plus épouvantables” (*Le Cosmos*, 93).

necessary and good progress in *The Cosmos* as well as in his *Course Notes on Nietzsche*, but in other writings he seems to have more doubts about cultural progress. In the final critical remarks, I will raise problems with De Koninck's theory of human and cultural evolution.

(5) *Is Evolution among Infrahuman Living Things Over?*

If there are no more evolutionary leaps from primates to humans and there will never be any leaps from humans to some essentially higher nature, then it seems that De Koninck would hold that biological evolution must have stopped all together, once the first man and woman appeared. However, De Koninck does see secondary ends in the variety and beauty of a profusion of types of living things. It is likely that he would not be disconcerted by a certain amount of evolutionary fanning out of new species among infrahuman genera to fulfill this secondary aim, although there would be no more upward trend toward man. The variety of species, families, and orders is important, according to De Koninck, because it makes possible the formal unity of the cosmos.

The ensemble of parts that compose the homogeneous whole constitute a material or accidental unity of order; the heterogeneous whole on the contrary constitutes a unity of the formal or per se order and is more perfect to the degree that it is more essential... But it is in this unity of a formal or per se order that the perfection of the universe consists.¹⁶⁶

The impulse toward the fanning out of new species is part of the love of the common good of the unity and beauty of the cosmos. The beauty of the cosmos, in term, leads man to know and love his creator. The arrival of man would not prohibit this goal still existing, although the evolution of new species would no longer be necessary once the primary goal was achieved, the evolution of man.¹⁶⁷

¹⁶⁶ *The Cosmos*, 316-317. "L'ensemble des parties qui composent le tout homogène constitue une unité d'ordre matérielle ou accidentelle; le tout hétérogène au contraire constitue une unité d'ordre formelle ou per se, et qui est plus parfaite à mesure qu'elle est plus essentielle... Or, c'est dans cette unité d'ordre formelle ou per se que consiste la perfection de l'univers" (*Le Cosmos*, 112).

¹⁶⁷ A number of scientists argue that data supports the notion that evolution in the sense of speciation or development of higher orders is over. For example, A.S. Roemer, a paleontologist and convinced Darwinian, shows in graphs the curves of species development among fish, amphibians, reptiles, birds, and mammals. In each case there is a geologically rapid fanning out of species over some millions of years and then stasis with no more branching off of orders, families, genera, and probably even of species. A.S. Roemer, *Vertebrate Paleontology*, 3rd Edition (Chicago: University of Chicago Press, 1966), fig. 67 on p.41 and fig.156 on page108.

(6) Extinction

After the advent of man, not only is the fanning out of new species unnecessary so is the existence of many of the species that led to the evolution of man.

This increasing variety of species is necessary in the world only insofar as it is found in a state of maturation... Since the multiplication of individuals within a species is repugnant to the idea of an end, since the individuals of infrahuman living species are totally corruptible, it follows that the very existence of these species is naturally *sacrificed* to the human species... That the infrahuman living things are destined to disappear presents no special difficulty. Their sole reason for being is to contribute to the establishing of the world in its ultimate perfection. The sculptor does not adorn the statue with the hammer and chisel he used to make it nor the debris of rock.¹⁶⁸

De Koninck finds it natural that animal and plant species should become extinct, because their existence was merely useful, and once their purpose had been served, they are no longer needed. Although this text refers to the extinction of living beings in heaven, it could equally refer to their extinction in cosmic history. Since infrahuman living beings are for the sake of man, it is not unfitting for them to become extinct, after playing their part in the drama of evolution. The unity constituted by the variety of living beings acting upon each other and bringing forth man will be preserved in the knowledge of man, if not now, at least in heaven. The dinosaurs still exist in the cosmos by existing in human knowledge. Other living beings whose record may have perished

John Davison in his paper, *An Evolutionary Manifesto*,¹⁶⁷ collected a number of quotations from many famous paleontologists from different countries who also concluded that evolution is over. One of the most striking is Julian Huxley because he has been such an influential Darwinian. Huxley wrote in his famous book *Evolution: the Modern Synthesis*.

“Evolution is thus seen as a series of blind alleys. Some are extremely short—those leading to new genera and species that either remain stable or become extinct. Others are longer—the lines of adaptive isolation within a group such as a class or subclass, which ran for tens of millions of years before coming up against their terminal blank wall. Others are still longer—the links that in the past led to the development of the major phyla and their highest representatives; their course is to be reckoned not in tens but in hundreds of millions of years. But all in the long run have terminated blindly. That of the echinoderms, for instance, reached its climax before the end of the Mesozoic. For arthropods, represented by their highest group, the insects, the full stop seems to have come in the early Cenozoic, even the ant and bees have made no advance since the Oligocene. For the birds, the Miocene marked the end; for the mammals the Pliocene.”

¹⁶⁸ *The Cosmos*, 318-319. “Cette grandissante variété d’espèces n’est nécessaire dans le monde qu’en tant qu’il se trouve à l’état de maturation... Puisque la multiplication des individus à l’intérieur d’une espèce répugne à l’idée d’une fin, puisque les individus des espèces vivantes infrahumaines sont totalement corruptibles, il s’ensuit que l’existence même de ces espèces est naturellement sacrifiée à l’espèce humaine...”

Que les vivants infrahumains soient, destinés à disparaître, cela ne présente aucune difficulté spéciale. Leur seule raison d’être est de contribuer à établir le monde dans sa perfection ultime. Le sculpteur ne garnit pas la statue des marteaux et des ciseaux dont il s’est servi pour la tailler, ni des débris de pierre” (*Le Cosmos*, 113).

will be preserved in our more perfect knowledge in beatitude. The unity achieved by the coordination of all the sub-rational beings on Earth to produce and sustain man is preserved in a higher way in man's knowledge. The fate of sub-rational species is to come to be, to exist for a time, and then to pass away.

4. Why is Evolution Natural?

One of the most important questions for De Koninck is whether or not evolution is natural. If a spiritual agent must providentially organize matter as well as impart the spiritual pressure necessary for the organized matter to take on a new form by the "powers of soul" in the elements, how can De Koninck call it natural? By natural, De Koninck means that cosmic beings cause the origin and ascension of life by their natural activities, acting by their own form for an end that they possess as an orientation of their own nature and which they can enjoy. This seems to be precisely not true of the equivocal generations leading to evolution of higher forms from lower forms.

De Koninck emphasizes that this spiritual pressure is *natural* because it belongs to the original deepest nature of things to correspond to this active power. They were created to be moved from above. An example from art can illustrate this point. If man could give a corkscrew a nature, the act of opening a wine bottle would be natural to the corkscrew even though it can only do it when moved by man. For the corkscrew was made to open wine bottles but only as an instrument of man.

If the cosmos is thus essentially suspended from the spiritual universe, this does not prevent the tides that rise in it from being natural. It is natural for the world to receive its impetus from above. *A nature that has in itself only a passive principle of motion is nonetheless nature.*¹⁶⁹

¹⁶⁹ *The Cosmos*, 274; emphasis added. "Si le cosmos est ainsi essentiellement suspendu à l'univers spirituel, n'empêche que les marées soulevées en lui ne soient naturelles. Il est naturel pour le monde de recevoir son impulsion d'en haut. Une nature qui n'a en elle qu'un principe passif de mouvement est cependant nature" (*Le Cosmos*, 48-49, citing SCG III 23.8 on the motion of the heavens: "Dicitur enim esse motus aliquis naturalis, non solum propter activum principium, sed etiam propter passivum").

Since natural things are made with an intrinsic order toward the forms, which the spiritual power moves them to acquire or toward the motions that the spiritual power imparts to them, the motions are still natural because they correspond to the nature's intrinsic ordination. The end is really in them; it is part of their logos. Furthermore, the spirit imparts the impulse towards activities and forms in them as a power that is really within them. Even the lowest most primitive composite, be it a nuclear particle or plasma or atom or whatever, always has this power within it of responding to accidental changes by becoming a new substance. It is something like the power of sight that belongs to an animal as long as it is alive even if it is asleep or in the dark. When it is woken up and presented a colored object in the light, it will see. It is a power rooted in the soul and flowing from its essence. Thus some animals may only be able to see light and dark or moving objects. Many animals are color blind. The power of sight is determined by the particular kind of soul it flows from. In a similar way, the power to take on a new substantial form is rooted in the essence of the composite. The power flows from the composite's substantial form and so is only the possibility of becoming what this concrete level of being could become next, either higher or lower, if it were so disposed.

(1) First Answer: Cosmic Beings Take Time to Develop

As we saw in De Koninck's comparison of cosmic evolution to embryological development, he conceives of the cosmos as if it were one body developing to maturity, which is the development of reason in its highest members.

"In perfectible things, the imperfect is temporally prior."¹⁷⁰ Clearly this principle holds in the development of individual living things. The acorn is prior to the oak tree; the egg is prior to the chicken; the baby is prior to the mature adult. Shouldn't this principle hold among species also? Shouldn't there be a development from less perfect life forms to more perfect life forms in cosmic history?

¹⁷⁰ *The Cosmos*, 283. "Dans les choses perfectibles, l'imparfait précède le parfait dans le temps" (*Le Cosmos*, 65).

The successive and continuous duration is above all a sign of the qualitative enrichment of universal nature. To speak absolutely, it is this very enrichment that 'takes time.' Every nature tends to surpass itself, since of its very essence it is ordered to ever higher forms, until attaining an essentially immobile term.¹⁷¹

De Koninck says that it is *natural* for a composite to tend toward becoming a higher being until it becomes an immortal, immobile being. The very reason for time is to enable the cosmos to be perfected by the development of more and more perfect beings, until the predestined number of humans come to be which can return to God in knowledge and love and achieve a participated eternity in beatitude.

(2) Second Answer: The Goal of Matter and Nature

If, as has been argued, everything in the cosmos including prime matter is for the sake of bringing forth humanity, through whom alone corporeal substance can return to God its principle, then matter is more a desire for the form of man than a desire for any other form. It is appetite that cannot be satisfied by any lower form. Admittedly, matter, in itself, is pure potency. However, matter never exists by itself. As soon as it exists, it exists in a composite or composites, i.e., in the first elements. These elements are suffused with "powers of soul," from the spirit working the cosmos. Hence macro-evolutionary leaps from the inorganic to life, from plant to animal, and finally from animal to man are natural, because they fulfill the natural desire of an intrinsic principle, prime matter. Cosmic beings are brought into existence in order to be moved in this way.

¹⁷¹ *The Cosmos*, 283. "la durée successive et continue est avant tout signe d'un enrichissement qualitatif de la nature universelle. À parler absolument c'est cet enrichissement même qui "prend du temps." Toute nature tend à se dépasser, puisque de son essence même elle est ordonnée à des formes toujours supérieures, jusqu'à atteindre un terme essentiellement immobile. L'essence même de l'inorganique est ordonnée à cette dilatation" (*Le Cosmos*, 66).

(3) Objection 1: What Happens Naturally Happens Always or for the Most Part from an Intrinsic Principle of Motion.

An objector might refuse to call generations that result in a higher organism than the “parents” or proximate generators *natural* because a specific leap in generation is only possible when the spiritual power *intervenes* in an *unusual act*. But Aristotle says that nature is determined to one. What happens by nature happens always or for the most part. Furthermore, what is natural comes from an *intrinsic* principle of motion or being moved rather than an extrinsic principle; natural things differ from artificial things precisely in this respect. De Koninck’s explanation of evolution, as the result of an influx of spiritual power, would not make it any more natural than individual acts of creation for each species. Should we not reserve the name *natural* for generations where the generators are the proper causes of the generated? Univocal generation is natural because it occurs by *intrinsic* causes, by the form and the generative power of the generator for the end of the generator, the reproduction of its species. Equivocal generation is *unnatural* because it occurs by *extrinsic* causes; the apparent generator acts by a form and a generative power that it never fully possesses as its own act but only as motion, and it acts for the end of an *extrinsic* cause.

(4) First Answer: Mutations are Natural with respect to Universal Nature

Natural activities come from the intrinsic principles of the natural body that acts. It moves through its own form for an end that perfects it. In equivocal generations, the parents act by their own forms in generating to produce offspring, which are, in some ways like themselves, but there is something, considering the parents as individuals of a certain species, that is unnatural in the begetting since the parents do not possess the form perfectly which they communicate. They act as instruments for an end that does not perfect them as this specific kind of animal. Their motion is not proportionate to the results. A spiritual cause must do something (alter their gametes) in addition to what they do (by their reproductive acts) so that the offspring results. Nevertheless,

the equivocal generations are natural both with regard to an essential principle within them, prime matter, which is ordered to the human form and with regard to the end, which is the common good of the cosmos of which they are part. Furthermore, De Koninck does not propose that these mutations occurred by miraculous supernatural interventions in the natural course of the cosmos. Rather, the spirit or spirits moving cosmic bodies according to their natural activities bring about encounters between bodies that are by chance, with respect to the individual bodies that act on each other, yet are intended by the spiritual agent to cause the alterations that will dispose a body for a higher form. In addition, when matter is disposed to a higher form, God, making use of spiritual agents, draws forth that form by the “powers of soul” which He, through them, continuously pours into the elements since their creation.

(5) Second Answer: Nature Intends the Exceptional

Furthermore, according to De Koninck, nature intends the perfect and exceptional rather than the common and mediocre. Most tadpoles and minnows die, but nature intends them for the sake of the few that live to maturity and will reproduce and preserve the species. De Koninck says nature intends the wise man, not the fool and so it actually fails in most cases. Nature intends each species most of all for its role in bringing forth the form of man. Therefore, nature intends each species more for the sake of the adults that will produce the mutated higher progeny than for the sake of the adults that will reproduce the species.¹⁷²

¹⁷² Course Notes on Nietzsche: “When a biological species attains a relatively uniform statistical equilibrium, the equilibrium is abruptly broken, it splinters: this rupture gives birth to a *superior species* realized by rare exceptions. If you will, nature has a horror of flat uniformity; it tends toward a term more and more elevated. The evolution in nature (whether one conceives this evolution in a dynamic fashion or a static fashion) is realized by revolutions; revolutions worked by the rare cases which are detached from the majority” “Quand une espèce biologique atteint un état d’équilibre statistique relativement uniforme, l’équilibre est brusquement rompu, il éclate: cette rupture donne naissance à une espèce supérieure réalisée par de rares exceptions. Si vous voulez, la nature a horreur de l’uniformité niveleuse; elle tend vers un terme de plus en plus élevé. L’évolution dans la nature (que l’on conçoive cette évolution de façon dynamique ou de façon statique) se réalise par des révolutions: révolutions opérés par des cas rares qui se détache de la majorité.” (*Course sur Nietzsche*, Lecture 1, 15-16).

(6) *Third Answer: There is Contingency in both Univocal and Equivocal Generations*

Furthermore, De Koninck sees the same contingency in both univocal and equivocal generations. Nature acts *for the most part* because of the lack of necessity in cosmic forms. In univocal generation, robin eggs usually hatch into robins, but the eggs can fail to hatch, or hatch into two-headed robins in a fewer number of cases. In equivocal generation, although spiritual agents always intend the ascent of evolution, De Koninck believes that the intermediate spiritual agents do not determine precisely which act of generation will result in the generation of offspring of a higher species; rather, the angels move bodies by their natural motions so that their encounters will cause the right dispositions from time to time. A similar case is that of a man shooting ducks with buckshot. He intends to shoot a duck and aims the shotgun, but he does not intend a certain pellet to kill it. The absolutely first cause, however, must intend the particular effect.

This eduction of forms would not come about with *regularity* and *economy*, whatever the perfection of the principal agent, being given that the impulse is given according to the natures. But a nature is never entirely determined to the point of excluding chance and deviations, which are, paradoxically, natural consequents of the nature. The ascendance cannot describe a single trajectory. It entails deviant ramifications and failures.¹⁷³

De Koninck is proposing that the angels act by moving natural things to move themselves in their natural (not perfectly determined) way. The actual path to a higher organism (like which pellet hits the duck) would be contingent. Since the angels are causing the generation through natural bodies acting naturally, they are causing a contingent form to come about contingently.

It is understood that there could not be in matter considered as in itself pure potency seminal reasons [of the intermediary forms] in the Augustinian sense. The three determining causes (final, exemplary, and efficient) must be attached before we can speak of “reasons.” To speak absolutely, these reasons are rather in the intelligence of the spiritual agent who conceives more or less determinate prefigurations of the intermediary forms which, in this intelligence, rise up from a synthesis of the initial composite given at the origin with the ultimate end of the cosmos which they are going to link. These prefigurations are cosmic ideas: “also corporeal forms are derived from spiritual substances not, however, by infusing forms, but only by moving to the forms.

¹⁷³ *The Cosmos*, 286. “Cette éducation de formes ne pourra se faire avec régularité et économie, quelle que soit la perfection de l’agent principal, étant donné que la poussée se fait selon les natures. Or une nature n’est jamais entièrement déterminée au point d’exclure le hasard et les déviations, qui sont, paradoxalement, des conséquences naturelles de la nature. L’ascendance ne pourra décrire une trajectoire unique. Elle comportera des ramifications déviées, et des échecs” (*Le Cosmos*, 71).

Furthermore they are reduced to God, as to the first cause also of the species of the angelic intellects, which are certain seminal ideas of corporeal forms.”¹⁷⁴

The angels have “more or less determinate prefigurations of the intermediary forms” from God, which they are going to bring about through cosmic instruments. They are given the first composite or composites to work with, by creation, and the goal, mankind, but they work nature to bring about the intermediates in a natural way so that the particular subspecies of plants and animal could have been otherwise.

(7) Objection 2: It is Not Natural for an Organism to Desire the Death of its Species

Every being loves its own existence and seeks to preserve it; no being acts by nature for its own death or the death of its species. Therefore no parents could act naturally to generate something of another species.

(8) First Answer: Parents Generate Naturally

Evolution does not force us to say that any natural being desires its own demise or the demise of its species in generating something higher. Parents generate by the natural power of their souls. They act to communicate their life and they do communicate life in equivocal generations. Their act produces something higher because they are being used as instruments of a spiritual power, nevertheless the *act* of generation remains natural to the parents, and whatever is like the parents in the offspring comes naturally from their act. It is natural for parents to wish to generate and raise the best possible offspring on a continuum with their nature. Thus they are appropriate and

¹⁷⁴ *The Cosmos*, 349, footnote 96. “Il est entendu qu’il ne peut y avoir dans la matière pure puissance considérée en elle-même, des raisons séminales au sens augustinien. Il faut braquer sur elle les trois causes déterminantes (finale, exemplaire et efficiente) avant de pouvoir parler de “raisons.” À parler absolument, ces raisons sont plutôt dans l’intelligence de l’agent spirituel qui conçoit des préfigurations plus ou moins déterminées des formes intermédiaires lesquelles, en cette intelligence, jaillissent d’une synthèse du composé initial donné à l’origine avec la fin ultime du cosmos qu’elles vont relier. Ces préfigurations sont les idées cosmiques “[...]etiam formae corporales a substantiis spiritualibus deriventur, non tanquam influentibus formas, sed tanquam moventibus ad formas. Ulterius autem reducuntur in Deum, sicut in primam causam, etiam species angelici intellectus, quae sunt quaedam seminales rationes corporalium formarum” (*Le Cosmos*, 79, footnote 69, citing *ST I* 65.4).

even willing (in an analogical sense) instruments of the higher cause, even if they are not proper generators of the mutated offspring.

(9) Second Answer: Mutations Respond to the Natural Desire of Matter

Although the generation of something higher is not natural to parents because of the specific form of the parent; nevertheless, it is natural both to the parents and the offspring because of their matter. “Every nature tends to surpass itself, since of its very essence it is ordered to ever higher forms, until attaining an essentially immobile term.”¹⁷⁵ The final cause of matter is the human form. Every other cosmic form is on the way to the human form. Therefore the additional agency of the spiritual cause in evolution is responding to an appetite within the equivocal generators. *David* is an artifact because there is no order in marble to the form of *David*; the evolved progeny is not an artifact of the equivocal generator because there is an order in matter under any natural form to the next higher form until the human form is reached. The human form is already in prime matter potentially. The “powers of soul” are fermenting in the elements from the first moment of creation. Unlike the marble, whose existence does not depend at all on receiving the shape of *David* or any other shape by a man, the matter cannot exist without a natural form, and the more perfect a natural form by which it exists, the more perfect a being it becomes a principle of. Prime matter’s being is nothing other than this thirst for being perfected by natural form. In this respect, prime matter is more like the eye than marble. The eye is not indifferent to visible forms; it is made for them and perfected by them. The human eye (as part of a rational being) is more perfected by a beautiful form than by an ugly one. Similarly, prime matter is more perfected or indeed only fully perfected by the human form.

¹⁷⁵ *The Cosmos*, 283. “Toute nature tend à se dépasser, puisque de son essence même elle est ordonnée à des formes toujours supérieures, jusqu’à atteindre un terme essentiellement immobile” (*Le Cosmos*, 66).

(10) *Third Answer: Acts that Bring about the Intrinsic Common Good of Nature are Natural.*

The cosmos is an ensemble like an orchestra that has an accidental but real unity with a common good that belongs to the ensemble as such. Not every part consciously knows the goal and works towards it the way the players in an orchestra do; however, God does implant a desire, in some analogous sense of desire, for the common good of the cosmos in every natural being. He does not simply manipulate things, but draws them from their nature within. As God places a desire to preserve the species in animals as well as a desire for individual survival; so He also places an orientation toward the good of the cosmos in every natural substance. The formal unity of the cosmos is constituted by the diverse cosmic beings united by an order to that good.

Equivocal generation can only happen by the power of the intellectual substance that is governing nature. The intellectual substance is not properly part of the ensemble of universal nature; it is not a body. Nonetheless, it moves everything that moves in nature towards the good that it understands. It is like the conductor of the cosmic orchestra. In a certain sense, it is more nature than any natural being, since it understands and wills the goal of nature and directs everything in nature to that goal. For this reason, CDK calls the spirit's will "the cosmic will."

There is also a cosmic will which precedes that of man, and which is the active principle of the ascent of the world to its goal. ...The will by which this agent works the world and cooperates with nature in its ascent can be called *cosmic will* in the measure that it responds to the natural love in the world to become desire and conduct itself to its term.¹⁷⁶

CDK says that when we speak of the wisdom of nature or of nature acting for an end, we mean that all nature's works are directed by intelligence.

It is clear then, that from the philosophical viewpoint, all work of nature is ultimately that of an intellectual substance: "quodlibet opus naturae est opus substantiae intelligentia."¹⁷⁷ This is why we may say that nature is ingenious, that nature knows, and so on. Not because a natural being has intellectual knowledge, but because when the being itself has none, there is nevertheless intellectual knowledge in play. Mind is at work in the growth of a tree, or the rising of the sun. And this very intelligence is really bringing nature closer and closer to itself, it is drawing nature

¹⁷⁶ *The Cosmos*, 309; emphasis in original. "il y a aussi une volonté Cosmique qui précède celle de l'homme, et qui est principe actif de l'ascension du monde vers son terme. ...La volonté par laquelle cet agent travaille le monde et coopère avec la nature dans son ascension peut être appelée *volonté cosmique* dans la mesure où elle répond à l'amour naturel du monde pour le faire passer au désir et pour le conduire à son terme" (*Le Cosmos*, 103).

¹⁷⁷ SCG III 24.5.

to its own level, by increasing the interiority of natural beings, by enriching life. We will see later how this interiorisation is realised in the hierarchy of natural species.¹⁷⁸

Nature is directed by intelligence towards the goal of producing intelligence. Whether or not there is an intermediate or several intermediate spiritual substances, the ultimate spiritual substance guiding everything to its end is God who is within each thing holding it in being and directing it to its individual, specific and generic end. God is capable of disposing all things sweetly from within, drawing them to the good that is ultimately Himself.¹⁷⁹

If there is an intracosmic cause that is sufficient to bring forth all cosmic beings by the power of a spirit or spirits, or directly by God, should we not call that activity by which the intracosmic cause chiefly approaches its goal preeminently natural? It is equivocal generations that will bring about the goal of nature, the human being.

(11) Nature's Liberality: Uncertain Paths and Secondary Goals

Although De Koninck reiterates that the goal of evolution is to bring forth humanity and it is necessary that nature reach that goal, he sees the ascendancy as following a contingent path with many branches that lead to intermediate and secondary goals of nature.

This education of forms would not come about with regularity and economy, whatever the perfection of the principal agent, being given that the impulse is given according to the natures. But a nature is never entirely determined to the point of excluding chance and deviations, which are paradoxically, natural consequences of the nature. The ascendancy cannot describe a single trajectory. It entails deviant ramifications and failures.¹⁸⁰

Even the failures in nature, like the acorns that do not sprout, are according to nature and benefit the squirrels and birds. The path of evolution also seems to have had many trials, many

¹⁷⁸ Charles De Koninck, *The Problem of Evolution and Science*, (Charles De Koninck Archive. Folder 20:5, p.11; original in English.

¹⁷⁹ Wis 8:1: "For wisdom, the fashioner of all things, taught me...For wisdom is more mobile than any motion; because of her pureness she pervades and penetrates all things...She reaches mightily from one end of the earth to the other, and she orders all things well [sweetly; suaviter in Vulgate]." (Wis 7:22,24 and 8:1).

¹⁸⁰ *The Cosmos*, 286. "Cette éducation de formes ne pourra se faire avec régularité et économie, quelle que soit la perfection de l'agent principal, étant donné que la poussée se fait selon les natures. Or une nature n'est jamais entièrement déterminée au point d'exclure le hasard et les déviations, qui sont, paradoxalement, des conséquences naturelles de la nature. L'ascendance ne pourra décrire une trajectoire unique. Elle comportera des ramifications déviées, et des échecs" (*Le Cosmos*, 71).

failures, and many short trips that didn't go far. It uses chance as well. Yet the development of man was not the only intention of nature. According to De Koninck, the many side branches taken in evolution were also subordinate intentions of nature.

We ought not however seek the intention of nature exclusively in the limits of the torturous road which leads to man, nor to consider all the branches which left the road (and sometimes rejoined it later on) as pure failures. If the fundamental idea of nature was parsimonious and deterministic idea, it would certainly be so. But it is essentially liberal and magnificent, it has a horror of calculation.¹⁸¹

De Koninck says that nature has other intentions besides man in evolution. These intentions include the many false branches that left the path toward man. If the purpose of creation is to manifest God's glory, then the variety and appearances of plants and animals are important to this purpose. Nothing can manifest God to us unless we can meet it through our senses.

Each creature represents or expresses the divine goodness and beauty in a different way and to a different degree. "For from the greatness and beauty of created things comes a corresponding perception of their Creator" (Wis 13:1-5). A further beauty then arises from the order of the beings of this world amongst each other.

The multitude and distinction of things has been planned by the divine mind and has been instituted in the real world so that created things would represent the divine goodness in various ways and different beings would participate in it in different degrees, so that out of the order of dissimilar beings a certain beauty would arise in things, a beauty which shows the divine wisdom.¹⁸²

Nature is not purely expedient as Darwin held it to be. The many pathways of evolution have brought forth a great variety of living things and produced a baroque wealth of forms in many cases. Consider the many shapes of diatoms or the colors and shapes of seashells, which have no survival value, and are not leading to the form of man. They are simply beautiful. De Koninck

¹⁸¹ *The Cosmos*, 287. "Il ne faut d'ailleurs pas chercher l'intention de la nature exclusivement dans les limites du chemin tortueux qui mène vers l'homme, et considérer tous les embranchements qui s'écartent de ce chemin (et qui parfois le rejoignent plus loin) comme de purs échecs. Si l'idée fondamentale de la nature était une idée parcimonieuse et déterministe, il en serait certainement ainsi. Mais elle est essentiellement libérale et magnifique, elle a horreur du calcul" (*Le Cosmos*, 72).

¹⁸² St. Thomas Aquinas, *Compendium Theologiae* 102, end: "Est enim multitudo rerum et distinctio ab intellectu divino excogitata et instituta in rebus ad hoc quod diversimode divina bonitas a rebus creatis repraesentetur, et eam secundum diversos gradus diversa participarent, ut sic ex ipso diversarum rerum ordine quaedam pulchritudo resultet in rebus quae divinam sapientiam commendaret."

calls nature “liberal and magnificent.”¹⁸³ He sees the beauty and variety of natural forms to be both intended and contingent. A directing spirit intends them for the sake of man; yet they developed in a contingent way by natures acting naturally.¹⁸⁴

(12) Controversies over Evolution: Can God and Nature Both Be the Cause of Evolution?

De Koninck explains one illegitimate reason that causes some philosophers or theologians to be creationists (i.e., hold the immediate creation of all species). They believe that God’s causality and creaturely causality are competitive. They accept the common worldview that what enriches a creature’s causality impoverishes divine causality. What God causes, creatures do not cause; what creatures cause, God does not cause. Therefore it is necessary to retain space for God’s causality in the creation of each species. Intelligent Design theorists tend to have such a competitive view of divine and natural causality. One needs to find “gaps” that only God could transverse. However, the reverse is true. God is so far from competing with creaturely causality that the more the creature is a cause; the more God is a cause. God is so powerful a cause that He can enable His creatures to also be true causes of alterations and generations. God does not *intervene* in nature to cause evolution; He enables it to unfold from within.

Let us say that there are two ways in which scholastics have sought to honor the Creator. The one consists in diminishing as much as possible the causality of the creature. That is the “idea in the back of the mind” of those authors who are called creationists. They want us to think that it takes a special creative act for the production of each natural and biological species as is the case with the angelic species and human form. They deny the scientist the right to derive biological species the one from the other.

At the other extreme is found the Thomistic tendency, inspired by St. Augustine, which enriches as much as possible the causality of the creature, not with the goal of eliminating creative intervention, but in order to increase it; for the creative power, envisaged from the side of its effect is most profoundly at work where created causes are most causes. The more a creature is capable of acting, the more it manifests the power of its ultimate cause, for God is the cause of all causality. From this point of view, He is much more profoundly cause of our free acts than we are

¹⁸³*The Cosmos*, 287. “libérale et magnifique” (*Le Cosmos*, 72).

¹⁸⁴ Christoph Schönborn also talks about the “useless” beauty of nature in his catechesis on creation: “This beauty without purpose, the instances of marvelous perfection that are never seen, that have no practical purpose [and no selection value], but are simply manifestations of beauty, “unselfishly” pouring themselves out—we only begin to understand their significance when we look at the goal of creation, which is to praise.” Christoph Cardinal Schönborn, *Chance or Purpose? Creation, Evolution, and a Rational Faith*, ed. Hubert Philip Weber, trans. Henry Taylor (San Francisco: Ignatius Press, 2007), 67.

ourselves. If we have a dread of creationism this is because it is not creationist enough; in the final instance, it is a form of occasionalism.¹⁸⁵

De Koninck says that it gives more honor to God to recognize that He is so powerful and generous a cause that He enriches his creatures with the power to be causes as well. St. Thomas speaks of divine causality exercised in giving creaturely causality in *The Summa Contra Gentiles*.

A thing must be perfect in itself before it can cause another thing, as we have said already. So, this final perfection comes to a thing in order that it may exist as the cause of others. Therefore, since a created thing tends to the divine likeness in many ways, this one whereby it seeks the divine likeness by being the cause of others takes the ultimate place. Hence Dionysius says, in the third chapter of *On the Celestial Hierarchy* that “of all things, it is more divine to become a co-worker with God;” in accord with the statement of the Apostle: “We are God’s coadjutors” (1 Cor 3:9).¹⁸⁶

St. Thomas says that being a cause is the perfection that allows creatures to be most like God. The more causality creatures exercise, the more perfectly they imitate their Creator.

De Koninck mentions a similar dichotomy in modern thinking that places freedom and grace in competition: what is caused by grace is not caused by our freedom and vice versa. De Koninck insists that the opposite is true; the freer an act of will is and the more it comes from our innermost selves, so much the more is it a gift of God’s grace moving us from within to freely choose what is for our happiness.

St. Thomas describes how both God and a natural agent can be the immediate cause of the whole of the same effect in Book III of the *Summa Contra Gentiles*.

In every agent, there are two things to consider: namely, the thing itself that acts, and the power by which it acts. Fire, for instance, heats by means of heat. but the power of a lower agent depends on the power of the superior agent, according as the superior agent gives this power to the lower agent whereby it may act; or preserves it; or even applies it to the action, as the artisan applies an instrument to its proper effect, though he neither gives the form whereby the instrument works,

¹⁸⁵ *The Cosmos*, 292-293. “À l’autre extrême se trouve la tendance thomiste, qui s’inspire de saint Augustin, et qui enrichit autant que possible la causalité de la créature, non pas dans le but d’éliminer l’intervention créatrice, mais afin de la grandir: car la puissance créatrice, envisagée du côté de ses effets, est le plus profondément à l’œuvre là où les causes créées sont le plus causes. Plus une créature est capable d’agir, plus elle manifeste la puissance de sa cause dernière, car Dieu est cause de toute causalité. À ce point de vue, Il est d’autant plus profondément cause de nos actes libres, que ces actes sont plus nôtres. Si nous avons horreur de l’esprit qui anime le créationnisme, c’est parce qu’il n’est pas assez créationniste, parce qu’il est en dernière instance une forme d’occasionalisme” (*Le Cosmos*, 83).

¹⁸⁶ *SCG* III 21.3: Prius est unumquodque in se perfectum quam possit alterum causare, ut iam dictum est. Haec igitur perfectio ultimo accidit rei, ut aliorum causa existat. Cum igitur per multa tendat res creata in divinam similitudinem, hoc ultimum ei restat, ut divinam similitudinem quaerat per hoc quod sit aliorum causa. Unde Dionysius dicit, III cap. caelestis hierarchiae, quod omnium divinius est Dei cooperatorem fieri: secundum quod apostolus dicit: *Dei adiutores sumus* (1 Cor 3:9)

nor preserves it, but simply gives it motion. So, it is necessary for the action of a lower agent to result not only from the agent by its own power, but also from the power of all higher agents; it acts, thus, through the power of all. And just as the lowest agent is found immediately active, so also is the power of the primary agent found immediate in the production of the effect. For the power of the lower agent is not adequate to produce this effect of itself, but from the power of the next higher agent; and the power of the next one gets this ability from the power of the next higher one; and thus the power of the highest agent is discovered to be of itself productive of the effect, as an immediate cause.¹⁸⁷

St Thomas explains that the same natural effect like generation is truly the immediate effect of the natural agent or a series of natural and supernatural agents and God. De Koninck posits that the natural composite acts by the power of some cosmic instrument, which acts by the power of an angel, which, in turn, acts by the power of God.

Creationists might say that De Koninck's theory is occasionalism since it requires a spiritual power to bring forth the higher organism from the lower at the appropriate moment (occasion) when the lower life forms have disposed sex cells sufficiently. De Koninck says, on the contrary, that spiritual power is flowing constantly into the cosmos not only to sustain being but also to cause every motion and generation. The spiritual agent causes natural bodies to change the gametes by the active power of their qualities and to bring forth the new form by the "powers of soul" always present in the elements. God empowers creatures to be true causes by their efficacious activities, although always by the power of superior causes.

¹⁸⁷ *SCG* III 70.5: "In quolibet enim agente est duo considerare, scilicet rem ipsam quae agit, et virtutem qua agit: sicut ignis calefacit per calorem. Virtus autem inferioris agentis dependet a virtute superioris agentis, inquantum superius agens dat virtutem ipsam inferiori agenti per quam agit; vel conservat eam; aut etiam applicat eam ad agendum, sicut artifex applicat instrumentum ad proprium effectum; cui tamen non dat formam per quam agit instrumentum, nec conservat, sed dat ei solum motum. Oportet ergo quod actio inferioris agentis non solum sit ab eo per virtutem propriam, sed per virtutem omnium superiorum agentium: agit enim in virtute omnium. Et sicut agens infimum invenitur immediatum activum, ita virtus primi agentis invenitur immediata ad producendum effectum: nam virtus infimi agentis non habet quod producat hunc effectum ex se, sed ex virtute proximi superioris; et virtus illius hoc habet ex virtute superioris; et sic virtus supremi agentis invenitur ex se productiva effectus, quasi causa immediate.

5. Conclusion

This chapter traced the first part of De Koninck's philosophical treatment of evolution in *The Cosmos*. First, he argues from the nature of mobile being, matter, and natural forms that man is the intrinsic goal of the cosmos. Nothing in nature makes sense unless it is for the sake of man.

Next, De Koninck explains his solution to three of the principal philosophical problems with the ontological mechanism of evolution: (1) Lower organisms can generate higher ones, but only because a spiritual power uses the lower organisms as instruments. (2) Nevertheless, evolution is natural. The lower acts naturally to cooperate in generating the higher because the author of nature implants within matter a desire or love for the form of man as He implants in organisms a love for the species. It is love that drives the movement of ascent. (3) The lower are thus true causes of the higher because God's causality does not compete with their causality but empowers and directs it. What happens by natural causes or by chance happens at the same time by divine causality.

In the third chapter I will look at the goals of evolution. In light of what has been said, one might feel surprise that De Koninck speaks of many different goals to evolution. We will see in what follows that they are all united in the evolution and fulfillment of the human species.

CHAPTER THREE:

THE PHILOSOPHICAL POINT OF VIEW II:

THE GOALS OF EVOLUTION

The second part into which I have divided the philosophical chapter of *The Cosmos* is about the final cause of evolution. In the course of this part, De Koninck identifies a number of distinct evolutionary goals: more perfect thought, immortality, love, self-gift, freedom, and unity. Thought: “The Cosmos as Impulse towards the Life of Thought.”¹ Immortality: “Evolution is a struggle against death, by means of death if necessary.”² Love: “Moreover, the principal goal of this motion is not to make use of the passivity of nature, but to increase love in it.”³ Gift-of-Self: “Necessarily a work of nature and a gift-of-self (don de soi), so that evolution will be a gift-of-self in the precise degree that it is a work of nature.”⁴ Freedom: “By the very fact that nature tends toward intelligence and will, it also tends toward freedom.”⁵ And unity: “Tending toward a greater perfection, the cosmos, whose ensemble in its turn is only a part of the universe, also

¹ *The Cosmos*, 295. Ralph McInerny translates the first two titles of the sections: “The Cosmos as Impulse toward the Life of Thought,” from “Le Cosmos comme élan vers la vie de la pensée,” (*Le Cosmos*, 85) and “Cosmic Desire as Thrust toward the Consubstantial Love and Liberty,” (*The Cosmos*, 305) from “Le désir cosmique comme élan vers l’amour consubstantiel et la liberté” (*Le Cosmos*, 98). In both cases, De Koninck uses the phrase “élan vers” for what was translated in the one case as “impulse” and in the other as “thrust.” It would have been better to use the same term and note the original used *élan* to make clear the probable reference to the phrase *élan vital*, which Bergson made famous. Indeed De Koninck refers to Bergson in *The Cosmos* (English, 284; French, 67) and approves of his understanding of natural forms as contingent.

² *The Cosmos*, 301. “L’évolution est une lutte contre la mort, par la mort s’il le faut” (*Le Cosmos*, 92).

³ *The Cosmos*, 305. “Cependant le but principal de cette motion n’est pas de se servir de la passivité de la nature, mais de faire grandir en elle l’amour” (*Le Cosmos*, 103).

⁴ *The Cosmos*, 302. “Nécessairement une œuvre de nature est un don de soi, et par conséquent l’évolution sera don de soi, dans la mesure précise où elle est une œuvre de nature” (*Le Cosmos*, 95).

⁵ *The Cosmos*, 310. “Par le fait même que le cosmos tend vers l’intelligence et la volonté, il tend aussi vers la liberté” (*Le Cosmos*, 104).

tends toward a greater unity.”⁶ Since De Koninck has already argued that man is the intrinsic end of the cosmos, it might be surprising that he now argues that evolution is a process directed toward a number of goals. We will see, however, that all of these goals are reached by the production of man.

De Koninck gathers these goals into three sections: “Impulse toward the Life of Thought,” “Impulse toward Consubstantial Love and Liberty,” and “The Unity of the Cosmos.” Not surprisingly, we will discover that this tripartite division has a Trinitarian resonance. “The Life of Thought” points to the procession of the Son. “Consubstantial Love” points to the procession of the Holy Spirit. “Unity” points to the Father, the principle without a principle. In the section on the theological point of view, De Koninck will draw out the configuration of the Trinity in the cosmos. There he will argue that evolution aims at producing a more and more perfect imprint of the Trinity until it produces man, who is properly an image of the Trinity precisely because he has substantial unity, thought, and love.

1. Evolution: Impulse towards Thought

In the beginning, according to De Koninck, the cosmos had only the unity of physical contiguity. One part was next to the other, but the massive primal atom, as De Koninck called it, was without complex structure or the unity of a living thing.⁷ Once it exploded, the particles rushed away from each other in a universe of maximum disorder. “Let us imagine the initial state of our universe as a pure exteriority. The world was so to say entirely outside, separated from itself, imprisoned in itself and its own obscurity. It is dead, empty, an abyss of division.”⁸ De Koninck calls the cosmos, in its initial state, “dead” and “pure exteriority” because the parts do

⁶ *The Cosmos*, 314. “Tendant vers une plus grande perfection, le cosmos, dont l’ensemble n’est à son tour qu’une partie de l’univers, tend aussi vers une plus grande unité” (*Le Cosmos*, 109).

⁷ Today the initial matter of the cosmos is more often called a “primeval fireball.” See Chaisson, *Cosmic Evolution*, 108.

⁸ *The Cosmos*, 297. “Imaginons l’état initial de notre univers comme une pure extériorité. Le monde était pour ainsi dire tout entier au dehors, séparé de soi-même, emprisonné en soi-même et en sa propre obscurité. Il est mort, vicie, un abîme de division” (*Le Cosmos*, 88).

not have an interior form that unites them. They do not penetrate each other with relations of dependence or knowledge or desire.

The universe has slowly grown in unity through the clumping, organizing, and transforming of matter and radiant energy into galaxies, stars, planets, and finally on earth into living things and various food webs and water and elemental cycles that serve life. However, the cosmos becomes fully a *universe*, a unified whole, only in the understanding of its intellectual creatures, human persons. This unity arises from all of the parts being contained in the principal parts by knowledge; every human person is the entire universe by knowing it. De Koninck describes this unification in the human mind.

In order for the world to have a *raison d'être*, in order for it to be profoundly one and a universe, it is not enough that it be composed of parts and that these parts physically constitute a whole: it is necessary that all the individual parts be oriented toward that one in which all together can exist, that each of the principal parts of the universe should be the entire whole, that each of these universes be in some fashion all the others.⁹

For Charles De Koninck, physical arrangement according to some order is not sufficient to make the cosmos profoundly one. All the parts must be directed, from within, toward the principal parts, and each of the principal parts must contain in some way all the other parts. De Koninck quotes St. Thomas on the unity of the cosmos from *De Veritate*.

A thing can be perfect in two ways. In one way a thing is called perfect according to the perfection of its being, which perfection belongs to it according to its proper species. But because the specific being of a thing is distinct from the specific being of another thing, for this reason and in this precise respect, a created thing is purely and simply imperfect to the degree that it does not share in the perfection of the whole universe, a perfection which flows from the coordination of particular things. But in order to compensate for this defect, there is found in some created things another kind of perfection; that by which the perfection which is proper to one thing can exist in another, and this is the perfection of the knower as knower, for we say of an object that it is known when it exists in a certain fashion in the knower. That is why it is said that the soul is in a way everything. And in this fashion the perfection of the entire universe can exist in one of its parts. For this reason philosophers have held that the ultimate perfection to which the soul can attain consists in embracing the whole order of the universe and its causes.¹⁰

⁹ *The Cosmos*, 296. “Pour que le monde ait une *raison d'être*, pour qu'il soit profondément un et univers, il ne suffit pas qu'il soit composé de parties, et que ces parties constituent physiquement un tout: encore faut-il que toutes les parties individuelles soient orientées vers celles-là où elles peuvent exister toutes ensemble; que chacune des parties principales du monde soit le monde tout entier; que chacun de ces univers soit en quelque sorte tous les autres” (*Le Cosmos*, 87).

¹⁰ *de Veritate*, q. 2, a. 2, c.: Res aliqua invenitur perfecta dupliciter. Uno modo secundum perfectionem sui esse, quod ei competit secundum propriam speciem. Sed quia esse specificum unius rei est distinctum

Humans can contain the order of the cosmos by knowing it and thereby give it a more perfect unity in its intentional existence in the human soul than it possesses physically in its natural being.

De Koninck takes up an objection. Can one truly say that the human soul understands the order of the cosmos? We seem to understand very little clearly, much less everything. In answer, he replies that even though we only understand weakly, we do grasp in some meager way the whole of being or we could not say “non-being.” We know that outside of being there is nothing. Our whole intellectual life consists of penetrating more clearly and distinctly what was present in our first confused notion of being. Nonetheless, we are the weakest of knowers; a sign of this weakness is that we see the universality of our knowledge by our use of negation.

Evolution is a journey toward interiority from a beginning that was almost pure exteriority. “Intelligence being a species of compenetration, it is necessary that the universe fall back in a certain way on itself, and that it close in on itself, that it interiorize, and it is just this interiorization that will permit it to open onto itself.”¹¹ After the first instant, all the matter and energy of the cosmos was divided and flying away from itself. Every part was exterior to every other part. Particles or photons might collide with one another, yet every particle was dead and closed to every other particle and even closed to itself.¹² Only by ascending in the hierarchy of being could part penetrate part more and more perfectly until the cosmos becomes open to itself

ab esse specifico alterius rei, ideo in qualibet re creata huiusmodi perfectioni in unaquaque re, tantum deest de perfectione simpliciter, quantum perfectionis in speciebus aliis invenitur; ut sic cuiuslibet rei perfectio in se considerata sit imperfecta, veluti pars perfectionis totius universi, quae consurgit ex singularum rerum perfectionibus, invicem congregatis. Unde ut huic imperfectioni aliquod remedium esset, invenitur alius modus perfectionis in rebus creatis, secundum quod perfectio quae est propria unius rei, in altera re invenitur; et haec est perfectio cognoscentis in quantum est cognoscens, quia secundum hoc a cognoscente aliquid cognoscitur quod ipsum cognitum est aliquo modo apud cognoscentem; et ideo in III *de Anima* dicitur, anima esse quodammodo omnia, quia nata est omnia cognoscere. Et secundum hunc modum possibile est ut in una re totius universi perfectio existat. Unde haec est ultima perfectio ad quam anima potest pervenire, secundum philosophos, ut in ea describatur totus ordo universi, et causarum eius;” cited in *The Cosmos*, 295-296 ; *Le Cosmos*, 86-87.

¹¹ *The Cosmos*, 297. “L’intelligence étant une espèce de compénétration, il faut que l’univers retombe en quelque sorte sur lui-même et qu’il se resserre, qu’il s’intériorise et c’est justement cette intériorisation qui lui permettra de s’ouvrir sur lui-même” (*Le Cosmos*, 88).

¹² There could not be anything more distant from divine perichoresis.

in intellect and knowledge. Thus subatomic particles become united by the form of an atom; atoms become united by the form of a molecule; plants become united by a soul. The latter have more unity and interiority than lifeless matter and can relate, in a more than merely spatial way, to other members of the cosmos. Plants respond to light and gravity and draw water and minerals into themselves and change them into themselves. Animals can penetrate other beings still more profoundly by sensing and desiring them. “In assimilating the other in sensible knowledge, the animal already breaks the barriers of a separating space; he extends himself to what is not himself: he can live the other.”¹³ By knowledge, humans penetrate to the natures of other beings and bring them into their minds intentionally, thereby conquering the spatial exteriority of matter. At every higher level there are more profound relations towards more of the universe; these relations are modes of uniting beings and penetrating them in different ways.

Life reverses the tendency of the initial explosion of the Big Bang toward fragmentation of matter, dispersion of space, and degradation of energy. Organisms have ascended by a series of mutations or explosions. De Koninck uses the image of a chick breaking out of a shell or seeds from a capsule as further metaphors for mutations. In both cases, what was present inchoately needs to separate itself violently from its material precursor to develop. Unlike the *Big Bang*, these explosions have not led to dispersion and impoverishment but rather to richer and more unified forms of life. What was concentrated in the beginning spatially is dismantled and disorganized spatially in order to be concentrated and organized anew in living things. De Koninck calls this dismantling the loss of a cosmos. “When life travels toward an organization always more intense, the disorganization of the physical world is only a loss of a cosmos which is absorbed in life.”¹⁴ The order of spatial proximity in the cosmos due to the concentration of

¹³ *The Cosmos*, 301. “En assimilant l’autre dans la connaissance sensible, l’animal franchit déjà les barrières de l’espace séparateur; il s’étend à ce qui n’est pas lui; il peut vivre l’autre” (*Le Cosmos*, 93).

¹⁴ *The Cosmos*, 298. “Alors que la vie chemine vers une organisation toujours plus intense, la désorganisation du monde physique n’est qu’un déchet du cosmos qui s’absorbe dans la vie” (*Le Cosmos*, 89).

energy and mass in the initial matter is lost, but that loss is necessary to fuel the higher order of life.

Life conquers the dispersion of time as well as the fragmentation of space. Animals and humans have present to themselves their surroundings and their past. By mobility they can conquer the dispersion of space by being in many places consecutively, and by memory they can keep many places present to themselves at once. By memory and intention they can retain the past and possess the future, albeit imperfectly, in the present. Inorganic beings, however, are dominated by space and time. They exist only in one place and one time.

The expanding universe contracts in living centers that grow denser from the point of view of richness of inner life. The cosmos finally reaches man in whom all the levels of cosmic beings are united.

The universe...arrives finally at man, in whom the world succeeds in uniting all the degrees of cosmic being, and in thought, in which it touches and compenetrates itself. The world tends to join in man its extremities separated by space-time. In doing this, nature projects that whole hierarchy of species which the paleontologist and biologist study.¹⁵

De Koninck explains three ways that man unites the cosmos. First, in his natural being man is a microcosm; he is a body like inorganic matter; he has vegetative powers like plants and sensitive powers like beasts, as well as his unique power of reason. Second, man unites all cosmic beings in his mind by knowing them. All the parts of the universe separated in space and time are united in man's knowledge. Third, man unites all cosmic beings as the ultimate goal for the sake of which they exist.

A. Immateriality

De Koninck finds that the direction of the ascending movement in the cosmos has been towards forms increasingly more separated from matter. They are simpler and more unified in themselves, as well as more able to unify the disparate parts of the cosmos.

¹⁵ *The Cosmos*, 298. "L'univers... aboutit finalement à l'homme dans lequel le monde réussit à unir tous les degrés d'être cosmiques, et en la pensée duquel il se touche et se compénètre. Le monde tend à joindre en l'homme ses extrémités séparées par l'espace-temps. Ce faisant, la nature projette toute cette hiérarchie d'espèces qu'étudient le paléontologiste et le biologiste" (*Le Cosmos*, 90).

The vital thrust with which the cosmos is animated from outside since its origin, elicited from the potency of the matter of composite forms which emerge more and more from matter; that is, essences more and more simple and one... But, since essence is proportional to existence, the duration of cosmic beings is also more and more simple, and less and less temporal. As has been said, they are specifically hierarchized in their existence as well as in their essence. The animal is less temporal than the plant.”¹⁶

This rich paragraph needs a good deal of unpacking. First, let us look at how natural forms are more and more separated from matter. Even the substantial form of an element or compound is in some sense something immaterial. It is not just the bodily structure (i.e. the arrangement of protons and electrons or the arrangement of atoms). Rather, the form causes the structure; it causes the matter to be this particular element or compound with its specific structure and properties. It cannot, however, exist in any way apart from the matter it informs. Almost any change of the matter will cause the form to cease to exist except as a potency of the matter.

The plant form is more separated from matter than the inorganic form because it can maintain the same form while continually exchanging the particular matter it forms by its metabolism. Nevertheless, it still cannot be separated from the body it organizes. It is an interior principle, which enables the embryonic plant to develop into a particular visible structure with powers of self-motion. Aristotle and St. Thomas call this form, the form of a living body, a soul. The plant has a certain beauty and depth because the observer is aware of an inward principle of unity which is manifested in the outer form. For this reason, even the humblest living flower is more beautiful than any artificial one.¹⁷

The plant form is the source from which the powers of nourishment, growth and reproduction flow. These vegetative powers are found wherever there is life. The form causes the plant to be alive and to “want” to stay alive and mature and reproduce. The plant form also emerges from

¹⁶ *The Cosmos*, 299. Translation modified. “la poussée vitale dont le cosmos est animé du dehors dès l’origine, extrait de la puissance de la matière des composés dont la forme émerge de plus en plus de la matière; c’est-à-dire des essences de plus en plus simples et unes... Or, puisque l’existence est proportionnelle à l’existence, la durée des êtres cosmiques est aussi de plus en plus simple, de moins en moins temporelle. Comme il a été dit, ils sont spécifiquement hiérarchisés dans leur existence aussi bien que dans leur essence. L’animal est moins temporel que la plante” (*Le Cosmos*, 90).

¹⁷ For more on the relation of beauty to form, see Michael M. Waldstein, *Expression and Form: Principles of a Philosophical Aesthetics According to Hans Urs von Balthasar* (Ph.D. Thesis University of Dallas, 1981), 89.

matter in reproduction by reaching out of the particular plant to its offspring. In this way reproduction is a kind of bridge to sensation.

The nutritive and the augmentative (powers) have their effect where they exist, since the body itself united to the soul grows and is preserved by the augmentative and nutritive powers which exist in one and the same soul. But the generative power has its effect, not in one and the same body but in another; for a thing cannot generate itself. Therefore the generative power, in a way, approaches to the dignity of the sensitive soul, which has an operation extending to extrinsic things, although in a more excellent and more universal manner; for that which is highest in an inferior nature approaches to that which is lowest in the higher nature.¹⁸

Aquinas says that the reproductive power of plants approaches the excellence of the sensitive power of animals because its operation also extends outside the plant to the other. Yet the simplest animal has a higher, more immaterial power than the most excellent plant. Every animal can transcend matter by sensation. Animals take in the form of the other as other. Sensation is a kind of knowledge; it involves consciousness, which plants lack altogether. With knowledge comes a new kind of appetite as well as many activities like, running, flying, hunting, web spinning, honey making, and dam building, that involve reaching out to the rest of the world and operating on it, a further emergence of the form from matter.

In the human person the form becomes actually separable from the matter. Although the human soul is still the principle of life and the source from which flow the vegetative and sensitive powers, it can perform an activity that does not use a corporeal organ, namely thought. Thinking is grasping the universal nature of things, while sensing is awareness of particular sensible bodies. The nature of bird is unchanging and immaterial. What it is to be a bird remains the same even if all birds should go extinct; the nature of bird is of no particular size or color; whereas the bird I see is yellow and not blue; it is fist-sized and perched on a tree. Although in this life, humans need the brain to think, it is not as the *organ* of thought that the mind needs the brain the way the eye is the organ of seeing. Rather, the mind needs to use images stored in the

¹⁸ *ST I* 78.2: “Nam nutritiva et augmentativa habent suum effectum in eo in quo sunt, quia ipsum corpus unitum animae augetur et conservatur per vim augmentativam et nutritivam in eadem anima existentem. Sed vis generativa habet effectum suum, non in eodem corpore, sed in alio, quia nihil est generativum sui ipsius. Et ideo vis generativa quodammodo appropinquat ad dignitatem animae sensitivae, quae habet operationem in res exteriores, licet excellentiori modo et universaliori, supremum enim inferioris naturae attingit id quod est infimum superioris.

brain to think; they are objects to be thought, after the nature has been abstracted, the way exterior bodies are objects to be seen. Aristotle uses this as the basis for his argument that the soul is immaterial and immortal; cosmic form achieves the utmost separation from matter in the human soul. Thus the impulse toward immateriality is an impulse toward the human soul.

B. Simplicity and Unity

Next we will look at how natural things become more unified as the forms emerge from matter. When one looks at living things, such as an oak tree or an elephant, and compares them to nonliving things, such as a rock or a lake, one is struck by their unity and self-motion. Each organism is a self in a world, which is not it. Chip away at a rock and it will get smaller but not less rock. It does not seem to do anything to stop you from chipping away at it. In fact it does not seem to do much at all. It falls if you drop it but this seems to be because it is being moved not because it is moving itself. The rock seems indifferent to what happens to it.

Living things, however, are in no way indifferent. They constantly do things *for themselves*. They develop themselves, nourish themselves, organize themselves, preserve and protect themselves, heal themselves, display themselves and reproduce themselves. As soon as there is life there is appetite, an inwardness from which springs desire because living things must constantly metabolize, or they die, cease to exist as this individual.¹⁹ Living things are enormously complex wholes consisting of millions of parts ordered in levels from the molecules to the cells, to the tissues, to the organs, to the systems, to the whole. At every level each part has a specific function that serves the whole. Despite this complexity, the living thing looks like a whole, acts like a whole, and maintains itself as a whole. Its unity greatly surpasses a rock or lake, where there is only spatial contact uniting the parts.

Living things are not equally one. The unity of an animal like a tiger greatly surpasses that of a tree. A tree is not conscious; it cannot see its food and desire and chase it, as the tiger can.

¹⁹ Hans Jonas, *The Phenomenon of Life: Toward a More Philosophical Biology* (New York: Harper and Row, 1966; Chicago: University of Chicago Press, 1985), 4.

Twigs can begin to grow roots even while still on the branch. Roots can send up shoots or suckers that develop into new little trees. The vegetative budding makes it difficult to decide sometimes whether a tree is one plant or many. How many souls are there in a tree with shoots? In the case of a higher animal like a bird or mammal, however, it is absolutely clear that the tiger or pelican is one animal that senses and desires good things for itself and shuns dangers to itself.

In the human person, the unity is still more pronounced. Humans are aware of themselves as selves, as free centers of knowing and feeling, desiring and acting. Because they have an intellect, which is capable of grasping universal being and a will capable of loving universal goodness, humans have an essentially new level of freedom. They possess themselves in a way beasts do not. They can understand their natural ends as ends and choose suitable means to achieve them. They do not simply follow instinctual drives.²⁰ They can understand and compare various ends like nutrition and religion and choose to fast from food as an act of worship. The ends they share with animals are fulfilled in a new human context where fulfilling the demands of friendship (as in marriage), the intellectual life (as in the *Symposium*) or religious life (as in sacred meals like the Passover or the Mass) regulate and elevate the animal acts of eating or generation to an essentially new personal level. In their self-consciousness and self-possession humans achieve a unique unity that dominates matter in a way that is superior to any other cosmic form. De Koninck concludes, “*Quanto forma magis vincit materiam, tanto ex ea et materia magis efficitur unum.*”²¹ Again we find that the impulse toward unity is an impulse toward the human form.

20 *ST I-II* 6.2.

21 *The Cosmos*, 299. “The more form dominates matter, the more matter is made one.” Citing *SCG II* 68.6: “Et inde est quod anima intellectualis dicitur esse quasi quidam horizon et confinium corporeorum et incorporeorum, in quantum est substantia incorporea, corporis tamen forma. Non autem minus est aliquid unum ex substantia intellectuali et materia corporali quam ex forma ignis et eius materia, sed forte magis: quia quanto forma magis vincit materiam, ex ea et materia efficitur magis unum. (*Le Cosmos*, 90).

C. Immortality

De Koninck explains that cosmic beings, in ascending the hierarchy of nature, also become less and less subject to the dispersal and degradation of time. There is a “hierarchy of durations”²² among cosmic beings that corresponds to the immateriality and unity of their essences. Man is less temporal than animals; animals are less temporal than plants; and plants are less temporal than inorganic substances. De Koninck brings up an obvious objection. We measure the ages of rocks, plants, animals and men by the same measure of a year. Rocks and stars and seas last much longer than any plants or animals. Does not “ten years” mean the same thing for all kinds of being?

Indeed it does not, insists De Koninck. Ten years for a woman might encompass college, marriage, giving birth to and nurturing three children. Ten years for a rock would encompass nothing more than maintaining its shape. Duration has to do with both the length and kind of existence substances possess. But, the kind of existence is proportional to the essence. The richer and more unified the essence of a being is, the richer and more unified its existence and duration will be. “A living being that existed only in an instant would have an infinitely richer duration than that of the stars, although it would be infinitely shorter; it is infinitely closer to eternity than the aging inorganic world.”²³

Some more examples will help show what De Koninck is saying. Every second for a rock is completely exterior to every other second, and equally indifferent to it. Its existence is so poor, so homogeneous and diffuse, that a million years for a rock have less content than a second for a living being. Existence is remaining the same for a rock, keeping the same elementary particles in the same structure. In contrast, the plant has a much richer life with constant change, growth, and development toward fulfillment. This gives its existence a certain unity. The seedling is growing

22 *The Cosmos*, 299. “hiérarchie de durées” (*Le Cosmos*, 90).

23 *The Cosmos*, 300. “Un être vivant qui n’existerait qu’un instant aurait eu une durée infiniment plus riche que celle des astres, bien qu’elle soit infiniment plus courte; elle est infiniment plus proche de l’éternité que celle du vieillissant monde inorganique” (*Le Cosmos*, 91).

towards maturity and reproduction; its mature form is already present as a goal from the beginning. Everything it does, such as bending towards the light or sending down roots towards water, is for a purpose and anticipates the future, and every goal achieved contains what went before as the perfect contains the imperfect. Animals have an even richer existence and conquer the diffusion of time much more by means of memory and desire. Consider birds that fly thousands of miles every year in their migratory journeys and come back to the same nesting area and the same mate. They are not “time’s fools.” Humans not only have personal memory but retain the history of their species, in writing, artifacts, and ceremonies. “Do this in memory of me.” Vows are a sign of the domination of the dispersion of time by humans. Both in marriage and in the religious life, humans hold the rest of their life in their hands and promise to live by a certain form until death. They give themselves in their entirety either to a human spouse in marriage or to their divine spouse in the religious life. In this gift-of-self “the whole person including the temporal dimension is present.”²⁴

De Koninck explains how memory conquers time:

Life goes against time’s dispersion. Time disperses; life gathers, tending toward structures that are more and more tight. It is a kind of triumph over the scattering of physical time. It is in the awareness of animals and men that we find the most obvious sign, and most specially in memory... Thanks to memory, we conserve that which has been lost in time... Memory is obviously meta-temporal since it contains that which is no longer in time. Our memory does not merely preserve the past like a phonograph record; by memory we know the past as past, and the past as past is in neither the past nor present. Thus man not only lifts himself above time like other animals with memory, but he can lift himself above memory.²⁵

²⁴John Paul II, *Familiaris Consortio*, 11.

²⁵*The Cosmos*, 246. “La vie chemine à rebours de la dispersion du temps: le temps disperse, la vie rassemble: elle tend vers des structures de plus en plus serrées. Elle est une espèce de triomphe sur l’éparpillement du temps physique. C’est dans la conscience des animaux et des hommes que nous en trouvons le signe manifeste, et plus spécialement dans la mémoire... Grâce à la mémoire, nous conservons ce que fait perdre le temps... La mémoire est manifestement méta-temporelle, puisqu’elle contient ce qui n’est plus dans le temps. Notre mémoire n’est pas simplement conservatrice du passé comme un disque de phonographe: par la mémoire nous connaissons dans le présent le passé en tant que passé: et le passé en tant que passé, n’est ni dans le passé, ni dans le présent. Donc l’homme, d’une certaine manière, ne s’élève pas seulement au-dessus du temps comme les autres animaux dans la mémoire, mais il sait s’élever au-dessus de la mémoire” (*Le Cosmos*, 13-14).

Life undoes the scattering of time, most obviously by memory. Memory does not just gather separate moments of time together like pebbles in a bag; it preserves time in its flow since we remember past events in order and as past.

De Koninck distinguishes three different ways that organisms overcome the dispersion of time. One way is by reproduction, through which organisms live on in their progeny and their species.²⁶ A second is by greater richness in the organism's life activities that pull more and more being into the organism's existence, as we have seen already in his treatment of memory.²⁷ A third is by the immortality of the human soul.²⁸ Immortality does not mean duration stretching out infinitely, but in heaven it becomes a participation in the simultaneity of God, where the whole of existence is possessed at once.

Evolution is a process trying to dominate the dispersion of time in all these ways; a yearning for immortality causes it.

Natural subhuman species should be considered as more and more audacious attempts to detach the world itself from the dispersion of time, in order to dominate it from outside, instead of being borne away by it. This ascent is made by *sacrificing* time from the point of view of quantity, as a man *sacrifices* his life in an heroic deed that makes him worthy of immortality. Evolution is a struggle against death, by means of death if necessary.

Our entire universe is troubled by a pitiless desire for immortality, a cosmic desire which takes on terrible proportions. The terrible thing essential to evolution is death.²⁹

De Koninck writes that evolution is driven by a "terrible" desire for immortality. It is terrible because it is so powerful that it is ready to sacrifice species to achieve it. Aristotle had already written, most eloquently, that reproduction flows from the desire of living beings for immortality.

The most natural act is the production of another like itself, an animal an animal, a plant a plant, in order that, as far as its nature allows, it may partake in the eternal and divine. That is the goal towards which all things strive... Since then no living thing is able to partake in what is eternal and

²⁶ *The Cosmos*, 301; *Le Cosmos*, 93.

²⁷ *The Cosmos*, 246; *Le Cosmos* 13-14.

²⁸ *The Cosmos*, 300-301; *Le Cosmos* 92-93.

²⁹ *The Cosmos*, 300-301. "Les espèces naturelles infrahumaines doivent être considérées comme des tentatives de plus en plus audacieuses de se détacher de la dispersion du temps, afin de le dominer du dehors, au lieu d'être emporté par lui. Cette ascension se fait en sacrifiant du temps au point de vue quantité, comme chez l'homme sacrifiant sa vie dans un acte héroïque qui le rend digne d'immortalité. L'évolution est une lutte contre la mort, par la mort s'il le faut.

Notre univers tout entier est travaillé par un impitoyable désir d'immortalité, désir cosmique qui prend des proportions terribles. Le terrible qui est essentiel à l'évolution, c'est la mort" (*Le Cosmos*, 92-93).

divine by uninterrupted continuance, it tries to achieve that end in the only way possible to it... so it remains not indeed as the self-same individual but continues in something like itself—not numerically but specifically one.³⁰

The goal of all natural things is to participate in the eternal existence of God as much as possible, according to Aristotle. Living things reproduce out of this desire for immortality, because it enables them to live on in their species.

De Koninck adds to Aristotle's account of reproduction that the equivocal generations in evolution stem from the same desire of universal nature for immortality. Producing man with his immortal rational soul fulfills the cosmic impulse toward immortality as well as toward immateriality and thought.

2. Evolution: Impulse towards Consubstantial Love

De Koninck provokes our interest by beginning this section with the declaration that not only does every being have love, but also every being is love:

Everything is love, either insofar as it is ordered to an end, or insofar as it travels toward that end, or insofar as it rests in it. Whether it be distinct from the loving subject or identified with him, every being is good insofar as it is an object of love--*bonum est quod omnia appetunt*.³¹

De Koninck is not asserting that every being is its own act of love the way God's essence and existence coincide with His act of love. Rather he is emphasizing how deeply the essence of every being consists of ordination to (or love for) an end. In particular, he turns to the essence or nature of cosmic beings. Nature is the principle of motion and rest in bodies; it is both potency and form. Potency, however, can only be a principle of motion because it is need or desire (in an extended sense). It is being toward another. The other toward which subhuman beings tend is

³⁰ Aristotle, *De Anima* II.4 (415a28-415b3).

³¹ *The Cosmos*, 305. "Toute chose est amour, soit en tant qu'elle est ordonnée à une fin, soit en tant qu'elle chemine vers cette fin, soit en tant qu'elle s'y repose. Qu'il soit distinct du sujet aimant, ou qu'il s'identifie avec lui, tout être est bon en tant qu'objet d'amour – *bonum est quod omnia appetunt*" (*Le Cosmos*, 98).

man, and through man, God. Subhuman things “are love and desire for man by their very tendency toward the explicit love of God.”³²

Thus just as evolution is the impulse towards more and more perfect knowledge, it is also the impulse towards more and more perfect love. Love follows knowledge. Therefore, love will become more perfect as knowledge becomes more perfect. More beings have love than have knowledge since even nonliving beings and plants have love but they do not have knowledge. Love, unlike knowledge, is coextensive with being.³³ For if we call “love,” in an analogous sense, any aptitude or proportion in a being toward a good, then there is love in anything that is able to be fulfilled by a good. Particles love the form of the atom that contains them as parts; atoms love the form of their molecule; molecules love the crystalline form they tend to. In each case, there is a tendency to bond with the other parts in a certain form. Plants love water and sunlight because they need them to maintain their life. Although there is love without knowledge in the inorganic and in plants, their love presupposes knowledge of their end in another, the One who orders nature. Love becomes more perfect the more it proceeds from the knowledge of the subject that loves rather than from another.

Animals’ love is imperfect in many ways, as is their knowledge; they can only love sensible things as suitable for satisfying their appetites. They cannot love, or even see a sunset but only what is important for finding food or staying safe. Not they, but the one who gives them their appetites and instincts, sets the parameters of their shrunken world.³⁴

Man, however, can know all being through his intellect and understand and love the universal good. Just as he can know his own intellect by reflecting on his act of understanding, he can love his own will in loving the good. Man’s love rebounds on himself as does his thought.

The principal goal of this motion is not to make use of the passivity of nature, but to increase love

³² *The Cosmos*, 308. “sont amour et désir de l’homme par leur tendance même vers l’amour explicite de Dieu” (*Le Cosmos*, 101):

³³ *ST I-II* 26.1; cited in *The Cosmos*, 305-306; *Le Cosmos* 98-99.

³⁴ See Josef Pieper on Jakob von Uexkuell’s research about the limited worlds of different animals in *Leisure The Basis of Culture* (South Bend, Indiana: St. Benedict’s Press, 1998), 82-83.

in it so that the desire might spring from a more and more profound interiority, proceed more and more from the within of nature by means of knowledge, and that love increase with consciousness, and in it, to arrive finally at a love reflected on itself.³⁵

We saw how evolution conquers cosmic exteriority in space and time by increasing interiority until it reaches intellectual thought, where it can unite every being in the cosmos and compenetrates it. In a similar way, evolution conquers cosmic exteriority by uniting beings in love. When a creature is produced that can know all beings and unite them all in thought, he can also unite all beings through love. He can reflect on himself in knowledge and love himself, therefore making a return to himself. He can also contemplate the cosmos, and love it and its creator. In this way, the cosmos is united as an object of the human will; love is a profound compenetration of the cosmos.

The nearer the cosmos draws to its aim, the more actively this love for the human soul comes from within the cosmic beings. From the purely natural appetite of inorganic matter, it rises in plants to a certain affirmation of life in metabolism and generation. In animals, there is sensitive appetite as well, which is called forth from within by sensitive knowledge. The more the appetite follows the organism's own knowledge, the closer the appetite approaches to the human will. In whatever measure a cosmic being tends towards preserving or reproducing its being, it tends towards human life to which it is ordered.

De Koninck calls this tremendous natural urge arising from the beginning of the cosmos toward bringing forth man "cosmic love and desire."³⁶ Is De Koninck positing a World-Soul that unites the cosmos into one substance that can be the subject or bearer of this "cosmic love?" No, there is no World-Substance of which we are all parts, as in Plato's *Timaeus*.³⁷ There are only many natural beings, each of which is a separate substance that loves and serves the cosmic good,

³⁵ *The Cosmos*, 309. "Le but principal de cette motion n'est pas de se servir de la passivité de la nature, mais de faire grandir en elle l'amour afin que le désir jaillisse d'une intèriorité de plus en plus profonde, qu'il procède de plus en plus du dedans de la nature au moyen de la connaissance, et que l'amour grandisse avec la conscience, et en elle, pour en arriver enfin à un amour réfléchi de soi" (*Le Cosmos*, 103-104).

³⁶ *The Cosmos*, 309. "amour et désir cosmiques" (*Le Cosmos*, 103).

³⁷ Plato, *Timaeus*: 30 b. For a contemporary argument that the Earth is a superorganism, see James Lovelock, *The Ages of Gaia: A Biography of Our Living Earth* (New York: W.W. Norton & Company, Inc., 1995) 213.

in various analogous ways. Yet the many substances do form one accidental whole, an ensemble, which is united by its causal order and final end.

De Koninck speaks not only of “cosmic love or desire,” but also of “cosmic will.” He calls “cosmic love” that tendency toward the human soul that exists in every subhuman cosmic being, even without knowledge, while “cosmic will” he reserves for the desire for humanity that is with knowledge. “Cosmic will” belongs to the spiritual agent or agents that are directing the process of evolution in the upward ascent to man.

There is cosmic love and desire, there is also a cosmic will which precedes that of man, and which is the active principle of the ascent of the world to its goal. Infrahuman living things are love for the higher forms of life, but this love cannot become desire without the cooperation of a sufficient cause, that is, of a cause at the level of the perfection of the goal pursued, and which in the final instance is nothing other than the spiritual agent (or agents) of which we have already spoken. The will by which this agent works the world and cooperates with nature in its ascent can be called *cosmic will* in the measure that it responds to the natural love in the world to become desire and conduct itself to its term. The ascent of life is thus a voluntary movement: *est voluntarius quantum ad principium activum, et naturalis, quantum ad principium passivum*. It is natural because of the passive principle, natural love, which tends to be released.³⁸

De Koninck calls evolution both voluntary and natural. It is voluntary because it is caused by a spirit who directs the process by intellect and will; it is natural because the process is answering the call of natural love in cosmic beings. All cosmic beings long for the generation of man, through whom they can love God.³⁹

A. Gift-of-Self

De Koninck calls evolution a gift-of-self from lower beings to higher beings because of its sacrificial logic. The lower gives itself in service to the higher that comes forth from it. A gift is something freely handed over to another to benefit the other; it is not brought about extrinsically

³⁸ *The Cosmos*, 309. “Il y a amour et désir cosmiques, il y a aussi une volonté cosmique qui précède celle de l’homme, et qui est principe actif de l’ascension du monde vers son terme. Les vivants infrahumains sont amour pour des formes de vie supérieures, mais cet amour ne peut passer au désir sans la coopération d’une cause suffisante, c’est-à-dire d’une cause au niveau de la perfection du terme poursuivi, et qui n’est en dernière instance autre chose que l’agent (ou les agents) spirituel dont nous parlions dans les cours précédents. La volonté par laquelle cet agent travaille le monde et coopère avec la nature dans son ascension peut être appelée volonté cosmique dans la mesure où elle répond à l’amour naturel du monde pour le faire passer au désir et pour le conduire à son terme. L’ascension de la vie est ainsi un mouvement volontaire: *est voluntarius, quantum ad principium activum, et naturalis, quantum ad principium passivum*; il est naturel à cause du principe passif, l’amour naturel, qui tend à être déclenché” (*Le Cosmos*, 103).

³⁹ Pascal Ide calls *The Cosmos* “une cosmologie de l’amour.” Ide, “La Philosophie de la Nature”, 501.

by violence. What is stolen is not given. But nature is an intrinsic principle of motion. What a cosmic being does by nature, it does from itself.

In the idea we make for ourselves of evolution, infrahuman beings are essentially in function of man, and fleeting: these natures thus are open to one another, constituting in their ascension toward him a more and more determined and powerful drive. But one should not conclude from this that this function is reduced to a pure canalization of the spiritual energy with which the cosmos is impregnated. [De Koninck is referring to spiritual power from God and perhaps from angels.] This is too simplistic an interpretation. Necessarily a work of nature is a *gift of self*, so that evolution will be a *gift of self* in the precise degree that it is a work of nature, without which the concept of nature would become an exclusively passive principle.⁴⁰

De Koninck sees the equivocal generations in evolution as instances of free movements from within which are gifts-of-self as well as impulses towards more and more perfect gifts-of-self until a cosmic being is produced that can image the self-gift of God the creator. He sees subhuman natures as provisional and functional, existing in service to man. Evolution is not a process purely driven by an extrinsic spiritual force but it is a process caused by the spirit to occur through the natural dynamic of gift-of-self that occurs in generation. Even inorganic creatures give themselves, although they cannot move themselves as living things do. Nevertheless they have a natural yearning for life and in particular for human life, the common good of the cosmos, which makes them apt to be moved toward producing life. They are form as well as matter; their forms are sources of movement even though the movements must be from an extrinsic mover as well. That is why Aristotle calls nature a principle of movement or *of being moved*. Moreover, even matter is not indifferent. “Man is in the last instance the *raison d'être* of matter.”⁴¹ Matter is precisely the potency or yearning for form, and most of all for the human form, as we saw in the section on the ontological mechanism.

⁴⁰ *The Cosmos*, 302; translation modified; emphasis added. “Dans l’idée que nous nous faisons de l’évolution, les êtres infrahumains sont essentiellement fonction de l’homme et passagers: ces natures sont par là entr’ouvertes les unes sur les autres, constituent dans leur ascension vers lui un élan de plus en plus déterminé et puissant. Cependant il ne faut pas en conclure que cette fonction se réduit à une pure canalisation de l’énergie spirituelle dont le cosmos est imprégné. Cette interprétation est bien trop simpliste. Nécessairement une œuvre de nature est un don de soi, et par conséquent l’évolution sera don de soi, *dans la mesure précise où elle est une œuvre de nature*, faute de quoi le concept de nature se ramènerait à celui de principe exclusivement passif” (*Le Cosmos*, 95).

⁴¹ *The Cosmos*, 265. “L’homme est manifestement la *raison d'être* de la nature entière” (*Le Cosmos*, 35).

The inorganic can only generate life as an instrument moved by a spiritual power, yet De Koninck says that it gives itself even as it is given because it is both formed for this gift and able to be fulfilled by accomplishing this gift as an instrumental efficient cause.

And yet, taking into account the motive for this need [to be moved]—a motive inscribed in the inorganic by its ordination to life, which is its *raison d'être*—already the non-living begs to be given it: it gives out of its desire to be given by its natural appetite. And in this way is accomplished the generosity nature is. The non-living moves only insofar as it is moved, but it touches life at its two extremities like the paintbrush through which is filtered the thought of the artist.⁴²

De Koninck uses the surprising phrases, “The non-living begs to be given,” and, “it gives out of its desire to be given.” We think of nonliving things as inert because they cannot move themselves; we think of them as silent with nothing to say. Yet even inorganic creatures have natures and De Koninck tells us that nature is generosity. Every nature is a determinate word (*logos*); it is aptness for a determinate gift. The non-living can only give itself by allowing itself to be used for life. It touches life both in the creator or angel who moves it to generate and in the new living thing that it generates. It is for the sake of life because it only exists to be used by life to generate, nourish or otherwise serve life. It exists to be given.

Nevertheless, De Koninck tells us that the plant can give itself more truly than nonliving beings because it possesses itself more truly.

While in the original eruption of life out of the inorganic the latter accomplishes the *gift of self* under the motion of a transcosmic agent [God or an angel]; the plant, on the contrary, is already a certain self that affirms itself, which assimilates the non-living, which communicates its own life in the generation of similar, restoring thus to the world more than it received. Here already is a *gift of self* by the self, that is, life.⁴³

The plant possesses itself as a self, although weakly and without consciousness. It affirms itself in metabolism; it takes in the inorganic, that which is not itself, and changes it into itself. Plants

⁴² *The Cosmos*, 303. “Et pourtant, tenant compte du motif de cette exigence – motif inscrit dans l’inorganique par son ordination à la vie qui est sa raison d’être –, déjà le non-vivant mendie pour donner: il donne par son désir d’être donné, par son appétit naturel. Et par cela même il accomplit cette générosité qu’est une nature. Le non-vivant ne meut qu’en tant que mû, mais il touche à la vie par ses deux extrémités comme le pinceau au travers duquel filtre la pensée de l’artiste” (*Le Cosmos*, 95-96).

⁴³ *The Cosmos*, 303. “Alors que dans l’originelle éruption de la vie à partir de l’inorganique celui-ci accomplit le don de soi sous la motion d’un agent transcosmique, la plante, au contraire, est déjà un certain soi qui s’affirme, qui s’assimile le non-vivant, qui communique sa propre vie dans la génération de semblables, restituant ainsi au monde plus qu’elle n’en a reçu. Ici, déjà, il y a don de soi-même par soi-même, c’est-à-dire vie” (*Le Cosmos*, 96).

could not live a day without actively working to stay alive. Plants give themselves actively in reproduction, passing on their specific life to progeny.

When we consider the plant in the perspective of the ultimate end to be attained—a pure interiority—it seems a shallow vase; its feeble capacity makes it too swiftly overflow it; the fruit of its maturing detaches from it; deprived of all consciousness, it cannot communicate its own life, it lives in the night; it is completely exhausted by generation. *Non enim est in plantis aliquod nobilior opus vitae quam generatio.*⁴⁴

De Koninck calls the plant a shallow vase because it has very little interiority. Plants have no consciousness; they reproduce their life without ever knowing that they are alive.

De Koninck refers to St. Thomas's treatment of emanations to continue this discussion. Emanations are processions of one thing from another. "The mode of emanation of beings varies following the diversity of their natures; and the more elevated the nature, the more what emanates from it is more intimate."⁴⁵ A house, a baby, and a concept are all emanations from a human. St. Thomas states that the more perfect a being is, the more interior its processions are. For example, a baby can cry or spit up, whereas an adult human can form a concept. The formation of a concept is more interior than the uttering of a cry and is possible for an adult because of his maturity. The emanation of plants is much less interior than a concept.

The life of plants is imperfect because, although with them emanation proceeds from an intrinsic principle, however, what emanates from them, gradually leaving the interior ends by being completely extrinsic: for example the sap in leaving the tree becomes first a flower, and then fruit which is distinct from the bark while remaining attached to it; when the fruit is fully developed, it is completely separated from the tree, and, falling to earth, produces another plant by the power inherent in the seed. Reflection enables one to see that even the first principle of this emanation is drawn from without for the tree draws from the earth, through its roots, this intrinsic sap with which the plant is nourished.⁴⁶

⁴⁴ *The Cosmos*, 303. "Lorsque nous regardons la plante dans la perspective de la fin dernière à atteindre – une intériorité pure – elle apparaît comme un vase peu profond; sa faible capacité de contenance la fait trop vite déborder; tout fruit de sa maturation se détache d'elle; dépourvue de toute conscience, elle ne peut se communiquer sa vie propre, elle vit dans la nuit; elle s'épuise tout entière dans la génération. *Non enim est in plantis aliquod nobilior opus vitae quam generatio*" (*Le Cosmos*, 96).

⁴⁵ *SCG* IV 11.1: "Principium autem huius intentionis hinc sumere oportet, quod secundum diversitatem naturarum diversus emanationis modus invenitur in rebus: et quanto aliqua natura est altior, tanto id quod ex ea emanat, magis ei est intimum;" cited in *The Cosmos*, 303 ; *Le Cosmos*, 96.

⁴⁶ *SCG* IV 11.3: "Est tamen vita plantarum imperfecta: quia emanatio in eis licet ab interiori procedat, tamen paulatim ab interioribus exiens quod emanat, finaliter omnino extrinsecum invenitur. Humor enim arboris primo ab arbore egrediens fit flos; et tandem fructus ab arboris cortice discretus, sed ei colligatus; perfecto autem fructu, omnino ab arbore separatur, et in terram cadens, sementina virtute producit aliam plantam. Si quis etiam diligenter consideret, primum huius emanationis principium ab exteriori sumitur:

The plant has very little interiority in its emanations. It must take in water and minerals from the outside and the plant's emanations proceed outside to new seedlings that grow entirely cut off from the parent plant.

De Koninck does not discuss animal reproduction in his discussion of gift-of-self in *The Cosmos* perhaps because it is common to plants and animals. This is confusing to the reader since De Koninck jumps from plant reproduction to animal sensation. Nonetheless, the animal does give itself in reproduction at least as much as the plant does; much more so in higher species with parental care of young. Gift-of-self, on the other hand, is hardly a common interpretation of sensation. However, De Koninck continues his discussion of gift-of-self by citing St. Thomas on sensation.

Above the life of plants, we find a more elevated kind of life, that of the sensitive soul, whose proper emanation, although its principle is extrinsic, nonetheless terminates in the interior; and the more one advances in emanation the more intimate it becomes, for the external sensible impresses its form on the external senses, when it passed to the imagination, and finally into the treasure house of memory. Moreover, at each step in this emanation, the principle and the term belong to different powers, for no sense power reflects on itself. This degree of life is thus so much superior to the life of plants that the proper operation of this kind of life is circumscribed in the intimacy of the being. Yet, is not an absolutely perfect life, since the emanation passes from one power to another.⁴⁷

The animal can take in the other, as other, in sensation, without destroying it as plants do in metabolism, when they take in minerals and water. Although the animal *receives* the sensible form from an exterior body, sensation is also an activity of the sensing animal. The animal produces the sensible form in the power of the sense. From the power of sense it transfers or *gives* the form to the imagination and from the imagination it transfers the form or *gives* it to the memory. We would not usually think of this as a gift, but there is a communication from one

nam humor intrinsecus arboris per radices a terra sumitur, de qua planta suscipit nutrimentum;" cited in *The Cosmos*, 303-304; *Le Cosmos* 96.

⁴⁷ SCG IV 11.4: "Ultra plantarum vero vitam, altior gradus vitae invenitur, qui est secundum animam sensitivam: cuius emanatio propria, etsi ab exteriori incipiat, in interiori terminatur; et quanto emanatio magis processerit, tanto magis ad intima devenitur. Sensibile enim exterius formam suam exterioribus sensibus ingerit; a quibus procedit in imaginationem; et ulterius in memoriae thesaurum. In quolibet tamen huius emanationis processu, principium et terminus pertinent ad diversa: non enim aliqua potentia sensitiva in seipsam reflectitur. Est ergo hic gradus vitae tanto altior quam vita plantarum, quanto operatio huius vitae magis in intimis continetur: non tamen est omnino vita perfecta, cum emanatio semper fiat ex uno in alterum;" cited in *The Cosmos*, 303-304; *Le Cosmos*, 97.

power to another. De Koninck agrees with St. Thomas that this communication or gift-of-self is higher than reproduction because it remains within the animal. It is more interior and immaterial. Because the animal senses, it is necessarily conscious, although it cannot reflect on its consciousness. Therefore it is more truly a self than a plant. It not only knows things through its senses, but desires or fears them.

Above the sensitive life of animals is the rational life of humans. Man is capable of a more perfect gift-of-self because of his reason. “Only the rational creature is able to give himself, in the measure that he is capable of possessing himself.”⁴⁸ Because he is self-conscious, man is the only cosmic creature that possesses itself sufficiently to make a true gift-of-self. The animal “cannot express himself to himself, he does not compenetrates in the consciousness of self.”⁴⁹ Humans, on the other hand, can reflect on their knowledge and come to know themselves. They express this knowledge in an interior word.

Self-knowledge and love might seem to be the most interior emanation that humans are capable of. “The highest degree of life is therefore the life of intelligence, because intelligence reflects on itself and can know itself.”⁵⁰ However, God is more interior to man than man is to himself,⁵¹ and therefore knowledge and love of God are more interior than human self-knowledge as well as having an infinitely superior object. The most perfect gift-of-self that man can make is in his knowledge and love of God.

In human intelligence the cosmos not only becomes present to itself, this presence opens on the whole of being and thus it can realize an explicitly lived return to the First Principle of being—God, who draws the world from Himself in order to ‘speak’ Himself by it, and which thus opens

⁴⁸ *The Cosmos*, 308. “Il n’y a que la créature rationnelle qui puisse se donner, dans la mesure où elle est capable de se posséder” (*Le Cosmos*, 102).

⁴⁹ *The Cosmos*, 304. “il ne sait pas qu’il connaît. Il ne peut à “se dire” à soi-même, il ne se compénètre pas dans la conscience de soi” (*Le Cosmos*, 97).

⁵⁰ *SCG IV* 11.4; cited in *The Cosmos*, 304 ; *Le Cosmos*, 97: “Est igitur supremus et perfectus gradus vitae qui est secundum intellectum: nam intellectus in seipsum reflectitur, et seipsum intelligere potest.”

⁵¹ St. Augustine, *The Confessions*, Loeb Classical Library (Cambridge, Mass.: Harvard University Press. And London: William Heinemann Ltd., 1977 [1912]), III 6.11, pp.118 and 120: “Tu autem eras interior intimo meo.”

an abyss [in the human heart] where He can make His abode.⁵²

In this gift-of-self to his creator, man completes the circle of creation, bringing back everything to God, including matter, which is endowed with soul in the human body, so that “God may be all in all.”

Only the rational creature is able to give himself, in the measure that he is capable of possessing himself. The love of irrational creatures is substantial, but it cannot be consubstantial; lacking consciousness, they cannot be with themselves. Possession of oneself is a condition of the gift of self. And that is why God alone can give Himself in a full sense, for He alone possesses Himself in an absolute manner. His communication of self is even so profound that it is terminated in beings capable of imitating Him and giving themselves in their turn; although God is the absolute cause of the gift of self in all intellectual creatures.⁵³

Properly speaking, sub-rational beings cannot give themselves because they do not possess themselves. They can only be said to give themselves analogically. De Koninck calls their love “substantial” because it flows from their substance but not “consubstantial” because it does not flow back to itself in self-consciousness. Humans, on the other hand, have self-possession and dominion over their acts because of their reason and will. They possess themselves sufficiently to make free choices and offer themselves in friendship. They are capable of a true gift-of-self. However, only God possesses Himself perfectly. God alone has perfect knowledge and love of Himself; He alone has perfect dominion over all His works. “That is why God alone can give Himself in a full sense... His communication of self is even so profound that it is terminated in beings capable of imitating Him and giving themselves in their turn.” God gives so great a participation of Himself to rational creatures that He gives them the power to give themselves back to Him in love.

⁵² *The Cosmos*, 305. “Dans l’intelligence humaine le cosmos ne devient pas seulement présent à soi-même: cette présence l’ouvre sur l’être tout entier, et par là il peut désormais réaliser un retour explicitement vécu au Premier Principe de l’être – Dieu, qui tire à Soi le monde afin de Se faire “dire” par lui, et qui creuse ainsi un abîme où Lui-même pourra faire sa demeure” (*Le Cosmos*, 97).

⁵³ *The Cosmos*, 308. “Il n’y a que la créature rationnelle qui puisse se donner, dans la mesure où elle est capable de se posséder. L’amour des êtres irrationnels est substantiel, mais il ne peut être consubstantiel; à défaut de conscience, ils ne peuvent pas être avec eux-mêmes. La possession de soi-même est une condition du don de soi. Et c’est pourquoi Dieu seul peut se donner au sens plein, car lui seul se possède d’une manière absolue. Sa communication de soi est même si profonde qu’elle se termine en des êtres capables de l’imiter et de se donner à leur tour, bien que Dieu soit cause absolue du don de soi de ces créatures intellectuelles” (*Le Cosmos*, 102).

The impulse toward love is an impulse toward gift-of-self. Again we see that the impulse driving evolution, in this case toward more perfect gift-of-self, is toward producing humanity.

B. Freedom

The tendency toward knowledge and will is also a tendency toward freedom. There is a hierarchy of creaturely freedom that corresponds to the hierarchy of knowledge and love. There is almost no spontaneity, or activity coming from within itself, in inorganic matter;⁵⁴ it is always moved in the same way by external causes. Rocks always fall down when dropped. Water always freezes when cooled below zero degrees Celsius. Living things, on the other hand, must act or die. As soon as there is life, there is a subject that is concerned for itself. As De Koninck says, “the plant, on the contrary, is already a certain self that affirms itself.”⁵⁵ There must be spontaneity or self-motion in living things because if an organism does not take in nourishment to maintain itself, it will die.

In nature we see evidence of increasing spontaneity in living things. Higher plants act with more spontaneity than lower plants, such as mosses. They respond to various stimuli as well as maintaining, developing, and reproducing themselves. Plants bend to the left or right according to the presence of the sun. Similarly, the roots of a plant will grow towards the source of water, in whatever direction it may be. During a drought, spruce trees will multiply the number of seed-bearing cones they produce, putting all of their life force into reproduction instead of dividing their activity between vegetative growth and reproduction. The differentiated growth in phototropism or hydrotropism and the increased reproductive activity in drought are all purposeful activities initiated from within the plant that benefit it.

⁵⁴ I say “almost” no spontaneity to leave room for the indetermination in nature. Nature acts “for the most part” because no natural form completely dominates its matter so there is always some room for deviation. See De Koninck’s “Reflections on the Problem of Indeterminism,” 403-438 for a long argument for true contingency in nature.

⁵⁵ *The Cosmos*, 303. “La plante, au contraire, est déjà un certain soi qui s’affirme” (*Le Cosmos*, 96).

Animals display even more spontaneity because they can sense and react according to their sense knowledge. Following the sensation of objects, there can be a conscious attitude toward the object sensed, either desire or fear. The lion sees a gazelle and wants to eat it; the gazelle fears and flees. The predator is clearly aware of its prey, as the prey is aware of its predator. Unlike the plant, which must physically touch its food, the animal can stand at a distance and perceive and move towards what it desires or flee what it fears. Thus these three powers of sensation, desire or emotion, and local motion are connected with each other and with the distance the animal has from the world and in particular from its food.⁵⁶ But these powers are not restricted to helping the animal obtain food; they also make possible communication, social life with courting and parenting, making things like nests or tunnels, and even play.

“Nothing equals the seriousness and pragmatism of the lower animals who do nothing useless. Higher animals, on the contrary, play. They have energy to dispense gratuitously. And if it is not perfectly disinterested, their play at least tends toward an activity exercised for themselves.”⁵⁷ Lower animals like ants or bees work with utter seriousness. It is impressive to see ants follow a trail over every obstacle; they do not deviate to the left or right. They do nothing useless; they never stop to look at the view. Higher animals, on the other hand, can play. Otters sliding down a snow bank or puppies wrestling are enjoying themselves and participating in an activity that is for its own sake. It may also contribute to their development, but it shows an extraordinary amount of spontaneity.

De Koninck finds a paradox in the increasing spontaneity of higher organisms, which are at the same time more determinate in their natures. The higher the organism, the more unified, or determinately one, a particular being is. Men are more unified or determinate than animals,

⁵⁶ See discussion on the connection between these powers in Jonas, *The Phenomenon of Life*, 104-105; and Aristotle, *De Anima* III.10 (433a10-433b30).

⁵⁷ *The Cosmos*, 310. “Rien n’égale le sérieux et le pragmatisme des animaux inférieurs qui ne font rien d’inutile. Les animaux supérieurs, au contraire, jouent. Ils ont de l’énergie à dépenser gratuitement. Et s’il n’est pas parfaitement désintéressé, leur jeu tend au moins vers une activité exercée pour elle-même” (*Le Cosmos*, 105).

animals are more unified than plants, and plants are more unified than rocks. The higher the organism, the more pronounced a self there is over against a more pronounced world. Man is more of a self than an animal. He can say, "I understand you" or "I love you." The animal is more of a self than the plant. It can feel desire or fear. It can enjoy itself while it eats. It is clear where an animal like a tiger is and where it breaks off. It is not so clear with an olive tree with shoots growing up from the roots. Is the whole thing one tree or many? Where does the parent tree stop and where do the baby trees begin?

De Koninck solves this paradox by explaining that there are two kinds of indetermination. One comes from a defect of being and the other comes from fullness of being. The indetermination of matter comes from its defectiveness. Matter is almost non-being; it is what is able to be many different kinds of bodies. Because it is only potency, it is indetermination by nature. No cosmic form can so perfectly dominate matter that it can absolutely determine it to one possibility. What happens by nature happens *for the most part* because nature can and does fail occasionally.

The indetermination that comes from fullness of being, on the other hand, is a result of a more determinate self that is more able to initiate activities from within. It is because a man has an interior life that is so much richer than an oak tree or an ape that he has the freedom to choose where to live, what profession to follow, whom to marry or whether to remain celibate...etc.

Animal instinct approaches more and more closely to reason in the higher animals, especially in primates. They can do many activities by their sensitive estimative powers that resemble activities stemming from the freedom of man. Their bodies also resemble men's bodies because their organs are suitable to their increasing freedom. Man has hands instead of paws or wings because hands are as versatile as freedom. They can be used to make any tool to do any job.

“Human nature is so rich that it needs nothing more.”⁵⁸ Man does not need wings because he can make airplanes; he does not need a shell because he can make houses and campers. He doesn’t need sharp teeth or claws because he can make knives and guns. Nature develops toward art. Man needs the arts to survive. But intelligence not only uses art to maintain and preserve life, but also to make it more beautiful and to serve the speculative life. Painting, sculpture, architecture, music, drama, and literature provide food for the embodied spirit of man. They are more liberal than technology that helps him to live longer or more safely. Language, logic, parts of mathematics and the experimental sciences are arts that serve the life of the mind. Modern technology can be liberal if it serves an increase in knowledge such as vision into the microscopic world of the cell or beyond the earth to the planets and even to distant galaxies. Thus the arts are natural to man, the rational animal, because they serve reason.

Man... uses the resources of art to draw to himself all the richness of the world diffused in space and time. The progress of navigation and aviation, the perfecting of telescopes, and the means of long distance communications supplied by modern technology are conquests for intelligence. The ultimate end of these emancipations is not control of the shipping of beans or bananas, nor weather prediction; it is more profoundly the exploration of the world with an eye to gathering it to a point, and contemplation.⁵⁹

The importance of technology for Charles De Koninck is not primarily to achieve power over nature for the safety and comfort of humans, but to increase the knowledge of man so that he can unify the cosmos in his thought and contemplate it.

The impulse towards freedom is the same impulse as that towards thought and love. It is fulfilled by man, but not as a technological animal. The fulfillment of the impulse towards freedom is man, the artist, scientist, and philosopher. The rational animal that contemplates the cosmos and imitates its beauty in fine arts completes the cosmos.

⁵⁸ *The Cosmos*, 311. “La nature humaine est tellement riche qu’elle ne se suffit plus” (*Le Cosmos*, 105).

⁵⁹ *The Cosmos*, 302. “L’homme... emploie les ressources de l’art pour tirer à soi toute la richesse du monde diffuse dans l’espace et dans le temps. Les progrès de la navigation et de l’aviation, le perfectionnement des télescopes et des moyens de communication à distance que permet la technique moderne sont des conquêtes pour l’intelligence. La fin ultime de ces affranchissements, ce n’est pas la commande ou le transport de haricots et de bananes, ni la prédiction de temps pluvieux, c’est profondément l’exploration du monde en vue de le ramasser en un point, et la contemplation” (*Le Cosmos*, 94).

3. Evolution: Impulse towards Unity

De Koninck concludes the second major part of *The Cosmos*, “Evolution from the Philosophical Point of View,” with a section on the unity and perfection of the cosmos. “Tending toward a greater perfection, the cosmos... tends toward a greater unity.”⁶⁰ The cosmos matures or becomes more perfect by increasing its unity. This unity is accomplished both through the development of an ordered hierarchy of cosmic beings and by the order of the cosmic beings to the production of man by evolution. The intrinsic end of the cosmos consists in this order. The extrinsic good of the cosmos is God, to whom the cosmos as a whole is ordered, through man.⁶¹

De Koninck raises an objection. In the beginning, there was one primal substance containing all the matter and energy of the world. Now there are millions of substances; elements, minerals, plants, animals, and humans dispersed throughout an enormous cosmos. Is there not a trend toward less rather than more unity? To answer this objection, De Koninck distinguishes between different sorts of unity. First, there is a “distinction between *one* the transcendental property of being and *one* the principle of number.”⁶² The growth toward unity in the cosmos is a growth from the numerical unity of one body toward more perfect transcendental unity, the unity that is coextensive with being. Second, there is a “unity of perfection and the unity that is a defect of being.”⁶³ The unity of prime matter is a unity because of defect and indetermination. “It is a unity which because of its imperfection cannot be differentiated or multiplied: it is one by negation.”⁶⁴ Since it is pure potentiality, it has no act by which it could be differentiated. If there were one inorganic body in the beginning, it would be as close as possible to prime matter since prime

⁶⁰ *The Cosmos*, 314. “Tendant vers une plus grande perfection, le cosmos... tend aussi vers une plus grande unité” (*Le Cosmos*, 109).

⁶¹ The return of the cosmos to God will be treated at length in Chapter Five on the Second Circle: Man Returns the Cosmos to God.

⁶² *The Cosmos*, 314. “distinction entre l’un propriété transcendantale de l’être et l’un principe du nombre” (*Le Cosmos*, 110).

⁶³ *The Cosmos*, 314. “unité par perfection de l’unité par défaut d’être” (*Le Cosmos*, 109).

⁶⁴ *The Cosmos*, 314. “Elle est une unité qui à raison de son imperfection ne peut être différenciée et multiple; elle est une par négation” (*Le Cosmos*, 109).

matter cannot exist at all unless it exists under some form.⁶⁵ When the primal matter is divided into many bodies the cosmos has more unity, because each body must have a certain nature which gives it a formal perfection and unity. The more tightly the bodies are ordered to each other by lines of causality, the more they can bring about a whole that has a positive unity, more like the unity of God, which is the unity of fullness of being, not the unity of lack of being.

The distinction and plurality of things comes from the intention of the first agent who is God. God has given being to things because of His goodness which He wishes to communicate and represent in them. And because a single creature would not be sufficient for this, He has produced many and different ones, so that what is lacking in one to represent the divine goodness would be supplied by another. Thus, the goodness which in God is simple and uniform is in creatures multiple and divided. In this way, the entire universe participates in the divine goodness and represents it more perfectly than any one creature whatever.⁶⁶

The fullness of being present in the transcendent unity of God is better represented by the formal unity of many distinct creatures united by order than by a single body united simply by contiguity.

However, an indefinite multiplication of individuals would not bring about the unity of the cosmos. Many homogeneous units can only form a unity of extrinsic continuity. All bodies together have a certain unity because they all belong to the same matrix of matter. But this is the weakest of unities. As we saw earlier, bodies are exterior to each other. They can touch each other or be changed into each other but there is no penetration of one within the other. Multiplying individuals indefinitely would only tend toward “the confusion and formlessness of prime matter.”⁶⁷ Moreover, the indefinite can never be a goal for any agent since it can never be

⁶⁵ This sounds much like the state of the beginning of the universe according to contemporary cosmologists and particle physicists. Davies says, “In the extreme high-energy limit, all of physics seems to dissolve away into some primitive abstract substratum.” *Cosmic Blueprint*, 125. Lederman calls the beginning state “a ‘hot soup,’ or plasma, of quarks and leptons (or whatever is inside, if anything) smashing into each other with energies like 10^{19} GeV, or a trillion times the energy of the biggest collider a post-SSC physicist can imagine building.” *The God Particle*, 387

⁶⁶ *ST* I 47.1: “Distinctio rerum et multitudo est ex intentione primi agentis, quod est Deus. Produxit enim res in esse propter suam bonitatem communicandam creaturis, et per eas repraesentandam. Et quia per unam creaturam sufficienter repraesentari non potest, produxit multas creaturas et diversas, ut quod deest uni ad repraesentandam divinam bonitatem, suppleatur ex alia, nam bonitas quae in Deo est simpliciter et uniformiter, in creaturis est multipliciter et divisim. Unde perfectius participat divinam bonitatem, et repraesentat eam, totum universum, quam alia quaecumque creatura,” cited in *The Cosmos*, 315; *Le Cosmos*.

⁶⁷ *The Cosmos*, 315. “la confusion et l’informité de la matière première” (*Le Cosmos*, 111).

achieved.⁶⁸ Therefore, the ultimate goal of the universe, the glorification of God, could not be achieved by the multiplication of individuals in one species but must be the multiplication of species or kinds of creatures united by an order to man, and through man to God. “The perfection of the universe is attended to with regard to species not with regard to individuals.”⁶⁹

Furthermore, De Koninck argues with St. Thomas that just as it is not only necessary that there be many different kinds of creatures, it is also necessary that there be creatures of unequal perfection, since difference stems from inequality. The difference between individuals of a species is a material difference; singulars are only numerically different. The difference between species is a formal difference. Since matter is for the sake of form, material differences are for the sake of formal differences. There are many individuals in a species in order to preserve the species, but the formal distinction of species requires inequality, a difference of perfection. Other distinctions, such as color or size are only material distinctions insufficient to provide a specific difference. For example, people of Asian, Western European, and African descent have many bodily differences, but these differences are not marks of a specific difference; the different races are equally rational, equally human. Such varieties within a species are not sufficient to reflect various aspects of God or to form a heterogeneous whole. There would be no hierarchical order or web of dependencies if there were no species unequal in perfection. Nature is not a democracy of perfectly equal creatures. The universe was created as a whole to represent God; its principal beauty arises from the perfection of its order which shows forth God’s wisdom most of all. Thus the universe needs different creatures of different degrees of perfection united by an order.⁷⁰

The cosmos, in tending toward unity tends toward heterogeneity, i.e. toward a multitude of species. But De Koninck has argued that all of the sub-rational cosmic species are for the sake of

⁶⁸ *ST I* 47.3 ad 2: “ nullum agens intendit pluralitatem materiale ut finem, quia materialis multitudo non habet certum terminum, sed de se tendit in infinitum; infinitum autem repugnat rationi finis;” referred to in *The Cosmos*, 315; *Le Cosmos*, 111.

⁶⁹ *SCG II* 84.5: “Universi enim perfectio attenditur quantum ad species, non autem quantum ad individua;” cited in *The Cosmos*, 315, *Le Cosmos* 111.

⁷⁰ *ST I* 47.2; cited in *The Cosmos*, 315-316; *Le Cosmos* 111.

man. Many serve their purpose in contributing to the upward movement of evolution; they may be useful in generating an organism that is a step on the path towards man and then become extinct. Indeed, most species of organisms have already passed away.⁷¹ Furthermore, De Koninck agrees with St. Thomas that at the end of the world all of the biological species lower than man will cease to exist. “This idea raises a great difficulty. On the one hand, we say that the world tends toward unity, and that this unity is more profoundly realized in heterogeneity, but we also said that the hierarchy of infrahuman living things is purely functional and provisory.”⁷² How can the perfection of the universe consist in a multitude of species if that multitude will cease to exist precisely when the universe achieves its perfection?

St. Thomas argues that at the end of the world only humans’ resurrected bodies, the heavenly bodies, and the elements will remain, while the rest of material creation—beasts, plants, and mixed bodies—will be destroyed in the last days.⁷³ De Koninck agrees that all plants and animals will cease to exist in heaven, since they existed only for the sake of bringing the cosmos to perfection. They were necessary for the cosmos to bring forth man through the process of evolution and to serve him in his bodily needs on earth. Once the predestined number of the saints has been reached, cosmic history will end. The saints will need no food or drink or air for their resurrected bodies since they will be incorruptible.

That the infrahuman living things are destined to disappear presents no special difficulty. Their sole reason for being is to contribute to the establishment of the world in its ultimate perfection. The sculptor does not adorn the statue with the hammer and chisel he used to make it nor the debris of the rock. If plants and animals had perfections such that they could contribute to the perfection of the world in its future and definitive state, unity would demand their perpetuation. But such is not the case, for they are by definition purely functional.⁷⁴

⁷¹ 99.9% of species that once lived on the earth have become extinct according to Mark Newman and Bruce Roberts in “A Mathematical Model for Mass Extinctions” Cornell University, May 20, 1994. <http://www.lassp.cornell.edu/new.mme/science/extinction.html> (accessed November 9, 2013).

⁷² *The Cosmos*, 317. “Cette idée soulève une grande difficulté” (*Le Cosmos*, 113).

⁷³ *ST* Supplement 91.5.

⁷⁴ *The Cosmos*, 318. “Que les vivants infrahumains soient, destinés à disparaître, cela ne présente aucune difficulté spéciale. Leur seule raison d’être est de contribuer à établir le monde dans sa perfection ultime. Le sculpteur ne garnit pas la statue des marteaux et des ciseaux dont il s’est servi pour la tailler, ni des débris de pierre. Si les plantes et les animaux avaient des perfections telles qu’ils pourraient contribuer

De Koninck compares sub-rational organisms to the chisel and hammer of a sculptor. Once the statue is done, the sculptor lays aside his instruments. Once man has evolved, nature can lay aside the organisms that were its instruments for producing man. During its history, the many different parts of the cosmos increased its unity because they were coordinated by a matrix of dependencies leading to one final end. Thus there was a richer unity flowing from “the coordination of parts”⁷⁵ than would be possible in Thales’ homogeneous universe of water. However, man sums up all of the subhuman cosmos; he unites all of its perfections in his nature. “In man himself a certain continuation of natures will appear; inasmuch as in him is brought together the nature of the mixed body and the vegetative and animal nature.”⁷⁶ All of the ontological richness of the cosmos can be contained in the superior unity of the one nature of man.

When one can suppress the multiple without harming unity, unity becomes more one and more dense. But the unity constituted by the multitude and diversity of biological species is actually diffused in the world. This unity will be preserved in the future, not by its diffusion, but in the intense unity of man where all perfections now diffused in the biological species will be united in a single species.⁷⁷

Even the riches of the history of the cosmos and the beauty of its dependencies and coordination can be unified and contained in man’s intellect. All that once existed physically in the universe will exist forever in human minds contemplating the creator and Lord of history. “Consequently it is also on the side of intelligence that one should seek the unity of the world: unity conditioned by the distinction of things according to form and not by confusion in matter.”⁷⁸

à la perfection du monde dans son état futur et définitif, l’unité exigerait leur perpétuation. Mais tel n’est pas le cas, car ils sont par définition purement fonctionnels” (*Le Cosmos*, 113).

⁷⁵ *The Cosmos*, 318. “la coordination des parties” (*Le Cosmos*, 113).

⁷⁶ *De potentia* 5. 9 ad 11: “in ipso homine continuatio quaedam naturarum apparebit, in quantum in eo congregatur et natura corporis mixti et natura vegetabilium et animalium; ” referred to in *The Cosmos*, 318; cited on 353, footnote 132: *Le Cosmos*, 114, footnote 109.

⁷⁷ *The Cosmos*, 318. “Quand on peut supprimer le multiple sans nuire à l’unité, celle-ci n’en deviant que plus une et plus intense. Or l’unité constituée par la multitude et la diversité des espèces biologiques est actuellement diffuse dans le monde. Cette unité sera conservée dans l’avenir, non pas dans sa diffusion, mais dans l’unité intense de l’homme où toutes les perfections maintenant diffuses dans les espèces biologiques seront unies en une seule espèce” (*Le Cosmos*, 113-114).

⁷⁸ *The Cosmos*, 319. “Par conséquent c’est encore du côté de l’intelligence qu’il faut chercher l’unité du monde: unité conditionnée par la distinction des choses selon la forme, et non pas par la confusion dans la matière” (*Le Cosmos*, 115).

Yet this line of thinking raises a new objection. If unity is the principle intrinsic good of the cosmos and it is perfected in human intelligence, then it seems better to have only one human to unite the cosmos in his intelligence rather than many, since many humans would diffuse the unity. Why should there be billions of humans? De Koninck's answer can be found in his writings on the common good. There he writes that God wished to communicate Himself more by communicating Himself to many men rather than to one. Both on the natural and the supernatural level, truth is always a common good and can only be attained well as a common good.

But society is not an entity separated from its members; it is constituted of persons who are the image of God. It is this society constituted of persons, and not some quasi-abstract entity, that is the principal intention of God. That its members are in the image of God is a sign of the perfection of their ensemble. Why would He have made many and ordered persons? Does not the divine good shine forth more brilliantly in a multitude and an order of rational creatures than in a single person as such? Is not truth better communicated in the contemplative life of the community than in the contemplative life of a single person?⁷⁹

Many men understanding the truth together as a common good do not diffuse unity, but increase it. On the natural level, society is essential for achieving human understanding. Humans need teachers. Each generation learns from past generations. The explosion of scientific knowledge in the last hundred years could only occur through the co-operation of a vast society of learners stretching from the past to the present. No single human can know all there is to know about our cosmos and its history, much less about its creator. However, together we can share our knowledge and increase the common treasure of knowledge of mankind. Moreover, humans form a hierarchy because of the degrees of perfection of their intellects and virtue, as natural beings do because of essential differences. This hierarchy produces a unity of order among humans similar to the hierarchy of the different grades of natural being.

⁷⁹ De Koninck, *The Primacy of the Common Good*, 101. "Or, la société n'est pas une entité séparable de ses membres: elle est constituée de personnes qui sont à l'image de Dieu. Et c'est cette société, non pas une entité quasi-abstraite, mais constituée de personnes, qui est de l'intention principale de Dieu. Que ses membres soient à l'image de Dieu, c'est un signe de la perfection de leur ensemble. Pourquoi aurait-il fait les personnes multiples et ordonnées? La bonté divine n'éclate-t-elle pas davantage dans une multitude et un ordre de créatures raisonnables que dans une seule personne comme telle? La vérité n'est-elle pas davantage communiquée dans la vie contemplative de la communauté que dans la vie contemplative de la personne singulière?" (*La primauté du bien commun*, 145).

According to De Koninck, inorganic matter and humans, which will alone form the final perfection of the cosmos are not sufficiently different to form a unity of essential order. They belong to the same genus of body. De Koninck argues from this deficient unity of essential order to the existence of angels. These spiritual beings are each a different species; they are so different from one another that they do not even share a common genus.

Our cosmic universe is the bottom rung of the whole of creation, of the universe in a full sense, where a pure and essential unity of order reigns. Like an isolated angelic species, our whole cosmos is only a degree, the lowest, of the universal hierarchy. It is only in the ensemble of the created universe, that is, in the ensemble constituted by all the specific universes that are the angels and the cosmos that we find that pure hierarchy which is of the very essence of the work of God.⁸⁰

De Koninck compares the entire material cosmos to one species of angel. It is the lowest species in the hierarchy of the universe, and it is the unity of the universal hierarchy that is the intrinsic goal of creation.

While the cosmos is like one species compared to the angels because all of its members are bodies, still there is a difficulty with De Koninck's doctrine that the entire cosmos is only one rung, and that the lowest in the universal hierarchy. Even in the natural order humans, like angels, are persons and willed for their own sakes as well as for the good of the cosmos. The cosmos is not actually one body with one substantial form. Much of it, De Koninck and St. Thomas hold, will be destroyed at the end of the world. Then human saints and angels will live together, praising God, in the hierarchy of heaven. Furthermore, we believe that Christ is King of the Angels and Mary is Queen of the Angels. She and Jesus are at the top rung of the universal hierarchy, not at the bottom, even though they are humans. "When he had made purification for sins, he sat down at the right hand of the Majesty on high, having become as much superior to angels as the name he has obtained is more excellent than theirs" (Heb 1:3-4). It may be that other

⁸⁰ *The Cosmos*, 320. "Notre univers cosmique n'est que le dernier échelon de la création totale, de l'univers au sens plein, où règne une unité d'ordre purement et simplement essentielle. Ainsi qu'une espèce angélique isolée, notre cosmos tout entier n'est qu'un seul degré, le plus infime, de la hiérarchie universelle. Ce n'est que dans l'ensemble de l'univers créé, c'est-à-dire dans l'ensemble constitué par tous les univers spécifiques que sont les anges et le cosmos, que nous trouvons cette hétérogénéité pure qui est de l'essence même de l'oeuvre de Dieu" (*Le Cosmos*, 116).

humans are all below angels, but we do not know the order of the hierarchy of saints in heaven. We do know that humans and saints will be united as members of one mystical body, under Christ as their head.

De Koninck ends this section by making a comparison between unity in hierarchy and monism and pantheism. De Koninck explains that the unity of the universe is the result of a hierarchy of essentially different natures, principally persons, unified by the order among them and their order towards God, their common good. Monism seeks for the unity of the universe in one shared substratum; all of reality is part of a single underlying substance. In other words it looks for unity in the lowest common denominator of the cosmos, the common matrix of prime matter. Pantheism equates God with the material world. “Pantheism, under the pretext of reducing the multiplicity of things to the greatest unity, pretends that God and the world are one; God is only the sum total of what exists, or the sum total of what exists represents only an aspect of the divine substance.”⁸¹ But if all things are God, then the particular natures of things are accidents; there is no true diversity. God becomes matter, as in Monism, and cosmic creatures are only accidental manifestations of God. Again, there is only the unity of indetermination or matter.

Only in God is there absolute unity. He alone can provide the coherence to all things because He is not mixed with them.

By His immensity, God is more intimately in creatures than creatures are in themselves. It is because He is absolutely one and infinitely distinct from His creatures that He can be infinitely close to them. If He were confused with things not only would God be separated from Himself—which would be the negation of absolute unity—but He would not even exist profoundly in creatures... things too would be deprived of their most intimate link, since God, their most profound principle of coherence, would be dispersed among them. The world would be like an army in disorder without a leader.⁸²

⁸¹ *The Cosmos*, 320. “Le panthéisme, sous prétexte de réduire la multiplicité des choses à la plus grande unité, prétend que Dieu et le monde ne font qu’un; Dieu ne serait ainsi que la somme de tout ce qui existe, ou bien tout ce qui existe ne serait que des aspects d’une même substance divine” (*Le Cosmos*, 116).

⁸² *The Cosmos*, 321. “par son immensité, Dieu est plus intimement dans les créatures que les créatures ne le sont en elles-mêmes. C’est parce qu’il est absolument un et infiniment distinct de ses créatures qu’il peut être infiniment près d’elles. S’il était confondu aux choses non seulement Dieu serait séparé de lui-même – ce qui serait en même temps la négation de l’unité absolue –, mais il ne pourrait même pas exister profondément dans les créatures les choses aussi seraient privées de leur lien le plus intime, puisque Dieu,

Only because God is utterly distinct from creatures, subsistent being itself rather than one being next to other beings, can He exist in every being by holding it in existence, knowing it, loving it, and directing it to its end. He unites all beings as the source from which they continually flow and the common good to which they are drawn as a final end. The cosmos finds its intrinsic end in the hierarchy of nature completed by humans, who unify the cosmos by thought and love and join it to God, who is both most within it and entirely distinct from it.

4. Conclusion

De Koninck has shown us that the impulse towards intelligence and the immateriality, simplicity, and immortality that accompany it, as well as the impulse toward cosmic love and the gift-of-self and freedom that accompany it, are accomplished in the production of man. It is in the intelligence and will of man that the unity of the cosmos is perfected. Evolution is a process that gathers up the dispersed parts of the cosmos into a greater and greater unity.⁸³ There is first a formal unity from the developing hierarchy of many cosmic species. Secondly, there is the unity of order of all the species toward the production and maintenance of man. Finally there is a superior unity, whereby all the species are preserved in the soul of man. This unity is the intrinsic common good of the cosmos, while the extrinsic common good of the cosmos is God, to whom the cosmos gives glory, most of all through man.

There is already an intimation of the Trinity in De Koninck's treatment of the impulses toward unity, thought, and love (traces of the Father, Son, and Holy Spirit). It is evident that the distinction of creatures that leads to thought and love leads to greater unity in the cosmos rather than less. In the theological section of *The Cosmos* summarized in the next chapter, De Koninck argues explicitly that evolution is an impulse toward an image of the Trinity: the human soul. What he does not argue, but could have argued, is that evolution also causes cosmic history to be

leur plus profond principe de cohérence, serait dispersé en elles. Le monde serait comme une armée en désordre et sans chef" (*Le Cosmos*, 117).

⁸³ *The Cosmos*, 314-321; *Le Cosmos* 109-117.

an image (in an analogous sense) of the Trinity. I make this argument in chapter six, using theological concepts from other works of De Koninck, which I discuss in chapter five.

CHAPTER FOUR:

THE THEOLOGICAL POINT OF VIEW

Charles De Koninck begins this section by distinguishing the theological point of view from the philosophical. Then he argues that there are truths about nature that we can only know from revelation. Third, he uses the light of revelation to discover deeper truths about evolution. He divulges a Trinitarian aspect to the evolving cosmos. De Koninck finds an imprint of the generation of the Son and the impulse of the Holy Spirit in evolution.

First, De Koninck explains what he means by the theological point of view. He contrasts it to the philosophical point of view by which we also know about God, but only insofar as He is the cause of all being. Through philosophical knowledge we can deduce certain things about God, such as His eternity and immutability, from what we know of created natures; however, He infinitely surpasses what we can know about Him by our unaided human intellect. We can know philosophically merely that He infinitely surpasses our knowledge. Only by revelation and faith can we know about God's inner Trinitarian life.

Not only are we ignorant of God, we are also ignorant of the deepest aspects of created natures when we try to penetrate their secrets with unaided human reason in philosophy. Thus theology also has something to teach us about nature. De Koninck says, "There must be in created nature aspects, the most profound, which are only manifest to the sight of God and which remain hidden to every created light."¹

¹ *The Cosmos*, 322. "Il doit y avoir dans la nature créée des aspects, les plus profonds, qui ne sont manifestes qu'au regard de Dieu, et qui demeurent cachés à toute lumière créée" (*Le Cosmos*, 118).

We are only aware of our ignorance, De Koninck tells us, because of the power of our intellect, which does stretch to all of being, even though weakly and confusedly. This power makes it possible for us to receive other gifts as additions to our intellect, sanctifying grace and the theological virtues, which make it possible for us to participate in God's hidden life. With grace and faith, informed by revelation, man can turn back to God in the friendship of charity. "By that gift the intellectual creature becomes capable of realizing an explicit return to God, not only under the general note of being, but under the proper notion of deity."² We can know God not only as the uncaused Cause of all Being, but as the Trinity.

God reveals Himself to man in three ways: First, He reveals Himself in creation to our unaided reason. This knowledge is "metaphysics which is a purely rational science."³ Second, He reveals himself in faith, which is a supernatural light by which we share in "God's own knowledge and will,"⁴ but obscurely. This knowledge is what De Koninck calls Sacred Theology. Third, He reveals Himself to the saints in heaven in the beatific vision. This is the science of the blessed.

Sacred Theology, the second kind of revelation, again treats of three kinds of truths, according to De Koninck. First, certain truths are revealed that can be known by human reason but, because they are so important for man's salvation and so difficult to know in his fallen state, God has revealed them in Scripture. Such truths would include the existence of God and the immortality of the soul. Second, certain truths are revealed about nature rather than about God, but which we could never know without revelation. De Koninck gives as an example that humans are made in the image of the Blessed Trinity.

There are others [truths] which concern nature itself as nature but that we could in no way know by the light of reason; thus the fact that every intellectual creature is made in the image of the Blessed Trinity, and that because of that our soul is naturally capable of being raised to the state of

² *The Cosmos*, 322. "Et par ce don la créature intellectuelle devient capable de réaliser un retour explicite à Dieu, non seulement sous la raison générale de l'être, mais sous la raison propre de la déité" (*Le Cosmos*, 118).

³ *The Cosmos*, 322. "la métaphysique qui est une science purement rationnelle" (*Le Cosmos*, 118).

⁴ *The Cosmos*, 322. "la connaissance et la volonté propres de Dieu" (*Le Cosmos*, 118).

grace and glory, is a truth that in nowise entails the necessity of such an elevation. Thus nature hides riches and passive potencies which are only open to the gaze of their supreme cause.⁵

We could never know the full possibilities of human nature by natural knowledge; we could never know that humans could be divinized by grace, inhabited by the Trinity, or come to see God face to face in the beatific vision.

To extend De Koninck's example, there can even be a theological biology, as in some questions in the *Prima Pars*. For example, St. Thomas finds a representation of God in the shape of man's body and his upright posture, "The very shape of the human body (adapted to look upward to heaven) represents the image of God in the soul by way of a trace."⁶ St. Thomas also finds a trace of the Trinity in the three elements present in vision and imagination, "Both in the corporeal and the imaginary vision we may find a trinity, as Augustine says."⁷

The third division contains truths "which bear on the fact of our elevation to the supernatural order and on the means of attaining the salvation that God wishes to give us over and above any demand of our nature."⁸ De Koninck does not give examples, but truths about the Incarnation and our redemption by Christ seem to fall in this category.

In this theological section of *The Cosmos*, De Koninck takes up truths of the second category: truths about nature that we could never know without revelation. He applies revealed truths to evolution in order to shed light on the history of the cosmos, but does not suggest that evolution

⁵ *The Cosmos*, 323. "Il en est d'autres qui concernent la nature même en tant qu'elle est nature, mais que nous ne pouvons nullement connaître dans la lumière de la raison; ainsi le fait que toute créature intellectuelle est faite. l'image de la Sainte Trinité, et que par là notre âme est naturellement capable d'être élevée à l'état de grâce et de gloire, mais cette vérité n'entraîne nullement la nécessité d'une élévation; la nature cache ainsi des richesses et des puissances passives qui ne sont ouvertes qu'au regard. de leur cause suprême" (*Le Cosmos*, 119).

⁶ *ST I* 93.6 ad 3: "corpus hominis, quia solum inter terrenorum animalium corpora non pronum in alvum prostratum est, sed tale est ut *ad contemplandum caelum sit aptius*, magis in hoc ad imaginem et similitudinem Dei, quam cetera corpora animalium, factum iure videri potest; ut Augustinus dicit in libro octoginta trium quaest. Quod tamen non est sic intelligendum, quasi in corpore hominis sit imago Dei, sed quia *ipsa figura humani corporis repraesentat imaginem Dei in anima, per modum vestigii*."

⁷ *ST I* 93.6 ad 4: "Tam in visione corporali quam in visione imaginaria invenitur quaedam Trinitas, ut Augustinus dicit in libro de Trin."

⁸ *The Cosmos*, 323. "qui porte sur le fait de notre élévation à l'ordre surnaturel et sur les moyens d'atteindre un salut que Dieu veut nous prodiguer au-dessus de toute exigence de la nature" (*Le Cosmos*, 119).

was explicitly revealed. This allows him and his readers to delve more deeply into the nature and meaning of the cosmos because his investigation bases itself on the revelation by which God gives us a share in His own knowledge. It “permits us to see certain aspects of the world as God Himself sees them, in the feeble measure to which the obscurity of faith and the deficiency of our intellect permits us to see.”⁹ It is a participation in the divine science.

Sciences are divided from each other according to the “differences of intelligible lights under which they are developed,” writes De Koninck. Some use their own proper principles, like metaphysics, which studies under the light of being qua being; others borrow their principles from a higher science as physics borrows from mathematics. Sacred Theology borrows its principles from the science proper to God and the blessed. It “proceeds in the very light of deity, a light given to us in the gift of faith.”¹⁰ Theology receives these principles from revelation, the Scripture and Tradition, under the light of faith.

The truths of Sacred Scripture cannot contradict what we know about nature through natural science or philosophy, De Koninck assures us, since there is only one reality, one cosmos. Theology can simply give us access to certain aspects of nature that experiments, observations, and philosophical reflection by the light of unaided human reason cannot reach.

After these preliminary distinctions about philosophical and theological ways of knowing nature, De Koninck proceeds to apply the light of faith and revealed doctrine in surprising ways to the evolving cosmos. Even if one does not agree with the contemporary separation of science and religion, it is still a shock to read that the impulse of the Holy Spirit causes evolutionary mutations. De Koninck is not afraid to push the unity of truth as far as he can all the way to the inner life of the Trinity.

⁹ *The Cosmos*, 323. “nous permet de voir certains des aspects du monde tels que Dieu lui-même les voit, dans la faible mesure toutefois où l’obscurité de la foi et la déficience de notre intelligence nous permettent de voir” (*Le Cosmos*, 119).

¹⁰ *The Cosmos*, 324. “procède sous la lumière même de la déité, lumière qui nous est dispensée dans le don de la foi” (*Le Cosmos*, 120).

1. The Cosmos as the Work of the Trinity

Creation is the common work of the whole Trinity, De Koninck explains, not the work of one divine person. He agrees with St. Thomas, whom he cites:

To create is properly to cause the being of things and because every agent produces a resemblance of himself, the principle of action can be judged from its effect. That is why creating belongs to God by reason of His being. But His being is not, as is the case in creatures, distinct from His essence: it is identical with His essence. But the divine essence is common to the three Persons. Therefore to create is not proper to one or the other of the Persons exclusively, but common to the whole Trinity.¹¹

The divine essence, while common to the three Persons, is not something other than the three Persons. When God creates, it is not some neutral divine essence that acts but the Father, the Son, and the Holy Spirit. Therefore, the Father creates as Father, as the one who speaks the Word. The Son creates as the Word spoken. The Holy Spirit creates as the Love, which proceeds from the Father and Son. How can we understand this Trinitarian dimension reflected in creation?

De Koninck follows St. Thomas in comparing God to an artist. Every artist makes an artifact through the word or plan of the artifact in his mind and the love in his will for the artifact-to-be-made. So too, God creates through the Word conceived by His intellect, in which are contained the ideas of the creatures, and through the Love of His will, by which He loves them and wills them to have existence.

Therefore, [like an artist], God the Father has realized the creature by His Word, who is the Son, and by His Love, which is the Holy Spirit. According to that, the processions of the [divine] Persons are the types *rationes* for the production of creatures, insofar as these processions include the essential attributes which are knowledge and will.¹²

¹¹ *The Cosmos*, 324. “Créer n’est pas propre à l’une des Personnes, mais commun à toute la Trinité. En effet créer est proprement causer l’être des choses. Or, comme tout agent opère à sa ressemblance, le principe de l’action peut se juger à son effet. C’est pourquoi créer appartient à Dieu en raison de son être. Or son être n’est pas comme dans les créatures distinct de son essence, mais il est identique à son essence. Or l’essence divine est commune aux trois Personnes. Créer n’est donc pas propre à l’une ou l’autre des Personnes exclusivement, mais commun à toute la Trinité” (*Le Cosmos*, 120).

¹² *ST I* 45.6. “Unde et Deus pater operatus est creaturam per suum verbum, quod est filius; et per suum amorem, qui est spiritus sanctus. Et secundum hoc processiones personarum sunt rationes productionis creaturarum, in quantum includunt essentialia attributa, quae sunt scientia et voluntas ;” cited in *The Cosmos*, 324-325; with words in brackets added by De Koninck. “Donc, [ainsi qu’un artiste], Dieu le Père a réalisé la créature par son Verbe, qui est le Fils, et par son Amour, qui est le Saint Esprit. D’après cela, les processions des Personnes [divines] sont les raisons de la production des créatures, pour autant que ces processions incluent les attributs, essentiels qui sont la science et le vouloir” (*Le Cosmos*, 121).

All creatures bear some trace of the three divine persons within them since the processions of the divine persons are the exemplar causes of creatures. For every effect resembles its cause.

2. The Trace and Image of the Trinity in the Cosmos

De Koninck follows St. Thomas closely in this section as one can see from the fact that every one of the twelve footnotes in the section is to one of Thomas's works, therefore I will use Thomas freely to explain the section. St. Thomas distinguishes two ways that effects can represent their causes: either by simply representing the causality of the cause but not its form, as smoke represents fire, or also by representing the likeness of the form, as when a child represents its father. The first type of representation he calls *vestigium*. This is usually translated by the word trace in English, but the more literal translation, footprint, is wonderfully concrete. One can imagine that just as Robinson Crusoe discovered the presence of another man, Friday, on the island through his footprints in the wet sand, we can discover God's presence in creation through his footprints in His creatures. The second type of representation Thomas calls image, which he reserves for rational or intellectual creatures. These alone possess intellect and will, which provide a specific likeness to the Trinity sufficient for them to be called image.

But the processions of the divine Persons relate to acts of intellect and of will, as has been said above; the Son proceeds as the intellectual Word, the Holy Spirit as the love of will. In consequence, in rational creatures endowed with intelligence and will, one will find a representation of the Trinity in the manner of an image, because one there finds a word conceived and a love which proceeds¹³

De Koninck explains more about the representation of the Trinity in man's knowing and loving God. First he notes that there is a circular movement in man's intellectual operations faintly like a "certain circular motion"¹⁴ in the intellectual operations in God.

As in God, so in the rational creature there is a certain circular motion in the operations of intellect

¹³ *ST I* 45.7. "Processiones autem divinarum personarum attenduntur secundum actus intellectus et voluntatis, sicut supra dictum est, nam filius procedit ut verbum intellectus, spiritus sanctus ut amor voluntatis. In creaturis igitur rationalibus, in quibus est intellectus et voluntas, invenitur repraesentatio Trinitatis per modum imaginis, inquantum invenitur in eis verbum conceptum et amor procedens;" cited in *The Cosmos*, 325; *Le Cosmos*, 122.

¹⁴ *The Cosmos*, 326. "un certain mouvement circulaire" (*Le Cosmos*, 122).

and will...*Est ergo tam in nobis quam in Deo circulatio quaedam in operibus intellectus et voluntatis.*¹⁵ But while God conceives His Word in knowing Himself, and conceives all things in knowing Himself—such that the circular motion is perfectly closed on Himself (*in Deo iste circulus clauditur in seipso*)¹⁶—in the rational creature on the contrary the circular motion is not entirely closed.¹⁷

Man knows and loves himself by his intellect and will, and he knows himself knowing, and loves himself knowing and loving. He knows and loves himself, his very substance from which flow his powers of intellect and will. However, this movement is not perfectly closed as it is in God. Man's essence is not identical to his will and intellect. Moreover he cannot know himself without knowing something exterior to himself first. Even when he knows and loves himself, the movement does not end there because he is not for his own sake, but for God. Nor is his substance an absolute beginning; man comes from God. Every act of knowing and loving originates in God since nothing is knowable except by participating in absolute truth, and nothing is loveable except by participating in the absolute good. "By their natural desire, created things love God more than themselves, and all knowers know God, at least implicitly, in any known object, for just as nothing is desirable save by its likeness to the supreme good, so nothing is knowable save by its likeness to the first truth."¹⁸ Only by knowing and loving God does man close the circle perfectly by returning to the origin and end of his substance as well as of his knowing and loving.

Consequently, the representation of the Trinity is found in a more express manner in the soul insofar as it knows God than insofar as it knows itself; that is why the image of the Trinity is

¹⁵ *de Potentia* 9.9: "Est ergo tam in nobis quam in Deo circulatio quaedam in operibus intellectus et voluntatis; nam voluntas redit in id a quo fuit principium intelligendi: sed in nobis concluditur circulus ad id quod est extra, dum bonum exterius movet intellectum nostrum, et intellectus movet voluntatem, et voluntas tendit per appetitum et amorem in exterius bonum; sed in Deo iste circulus clauditur in se ipso."

¹⁶ Ibid.

¹⁷ *The Cosmos*, 326. "Comme en Dieu, il y a dans la créature raisonnable un certain mouvement circulaire dans les opérations de l'intelligence et de la volonté... *Est ergo tam in nobis quam in Deo circulatio quaedam in operibus intellectus et voluntatis.* Mais alors que Dieu conçoit son Verbe en se connaissant, comme il conçoit toutes choses en se connaissant – de sorte que le mouvement circulaire est parfaitement fermé sur soi-même (*in Deo iste circulus clauditur in seipso*) –, dans la créature rationnelle au contraire le mouvement circulaire n'est pas fermé de toutes parts" (*Le Cosmos*, 122-123).

¹⁸ *The Cosmos*, 327. "Par leur désir naturel les choses créées aiment Dieu plus qu'elles-mêmes, et par ce désir elles sont plus unies à Dieu qui est la raison même du bien, qu'elles ne le sont à elles-mêmes; et de même tous les connaissant connaissent Dieu, au moins implicitement, dans tout objet connu; car de même que rien n'est désirable sinon par sa similitude avec la bonté suprême, de même rien n'est connaissable sinon par sa similitude avec la vérité première" (*Le Cosmos*, 123).

properly in the soul that knows God primarily and principally, and only in a secondary manner in the knowledge the soul has of itself, above all when it knows itself as an image of God and it is thus that this knowledge does not terminate in the soul itself but is raised up even to God.¹⁹

Man was created to know and love God. It is for the sake of attaining knowledge of God that man has self-consciousness and knowledge of being in general. De Koninck calls intellect and will “faculties of the divine” because through them “the universe rejoins its divine creator in an explicit manner, thus accomplishing the ultimate end of all creation.”²⁰ They are also faculties of the divine because they not only exist in God virtually, like vegetative and sensitive powers, but actually. God does not actually have metabolism or the power of sight or hearing, although He maintains His life and “sees” and “hears” by a spiritual power that virtually contains and vastly exceeds any organism’s power. However, He not only has, but formally is, intellect and will. Man is an *image* of the Trinity and not only a *trace* because he too has intellect and will and so can represent Him “in His form and species.”²¹

However, every creature represents the Trinity at least as a trace or footprint, because every creature bears a trace of the divine persons as its cause. Every creature, inasmuch as it is a substance and stands in itself and not in another, is like the Father, who is the principle not from a principle. Every creature bears the mark of the Son inasmuch as it was formed according to a word or plan, and the mark of the Holy Spirit inasmuch as it was formed with a certain order or relation to intermediate ends and to God, which St. Thomas and De Koninck call appetite or love.

De Koninck cites St. Thomas on the trace of the Trinity in creatures.

But in every creature there is a representation of the Trinity in the form of trace, for in each there is something which must be necessarily referred to the divine Persons as its cause. Indeed, every creature subsists in its being, has a form that places it in a species, and a relation to something else. Insofar as it is a created substance, it represents its cause, its principle, and thus points to the

¹⁹ *de veritate* 10.7: “Et ideo proprie imago Trinitatis in mente est secundum quod cognoscit Deum primo et principaliter: sed quodam modo et secundario etiam secundum quod cognoscit seipsam et praecipue prout seipsam considerat ut est imago Dei; ut sic eius consideratio non sistat in se, sed procedat usque ad Deum;” cited in *The Cosmos*, 327; *Le Cosmos*, 123.

²⁰ *The Cosmos*, 327. “C’est pourquoi l’intelligence et la volonté sont avant tout des facultés du divin, puisque par elles, l’univers rejoint son Créateur d’une manière explicite, accomplissant ainsi la fin dernière de toute création” (*Le Cosmos*, 124).

²¹ *The Cosmos*, 327. “Par là nous sommes faits à l’image de Dieu, nous le représentons dans sa forme et dans son espèce – *secundum formam et secundum speciem*” (*Le Cosmos*, 124).

person of the Father, who is a principle without principle. Insofar as it has a certain form, a certain species, it represents the Word, since the form of a work comes from the conception of the worker. Finally, because it is ordered and oriented, it represents the Holy Spirit envisaged as love, for the orientation of an effect to another thing is the deed of a will that creates.²²

3. Trace as Tendency toward Image

Furthermore, De Koninck says, the more perfect a creature is, the more perfectly it images the Trinity. First, there is gradation in unity: a plant is a more unified substance than a rock and hence more like the Father; an animal is more unified than a plant; and humans are more unified than animals. Second, there is gradation of form; more perfect creatures have more perfect forms that are more like the Word. Third, there is gradation of love; more perfect creatures have more perfect love, which makes them more like the Holy Spirit.

But the more perfect and one creatures are, the more they are traces or images of the Trinity. Just as angels are more in the image of the Trinity than men, so even the animal is a more profound trace than the plant and the inorganic. Hence infrahuman beings, in the measure that they tend toward man, tend as well, insofar as they are more or less profound traces, toward the image of the Trinity that is the human soul. From this point of view, we can consider the evolution of the cosmos as a maturation of traces which will terminate in an image of the Trinity.²³

The goal of evolution, De Koninck says, is to produce the most perfect reflection of the Trinity possible in the cosmos, mankind. Humans are called images of God, because they resemble the Trinity “in form and species.”²⁴ Humans have intellect and will like God.

Intellect and will are...formally in God, and not just in a virtual manner. One cannot say this of

²² ST I 45.7: “Sed in creaturis omnibus invenitur repraesentatio Trinitatis per modum vestigii, inquantum in qualibet creatura inveniuntur aliqua quae necesse est reducere in divinas personas sicut in causam. Quaelibet enim creatura subsistit in suo esse, et habet formam per quam determinatur ad speciem, et habet ordinem ad aliquid aliud. Secundum igitur quod est quaedam substantia creata, repraesentat causam et principium, et sic demonstrat personam patris, qui est principium non de principio. Secundum autem quod habet quandam formam et speciem, repraesentat verbum; secundum quod forma artificiatu est ex conceptione artificis. Secundum autem quod habet ordinem, repraesentat spiritum sanctum, inquantum est amor, quia ordo effectus ad aliquid alterum est ex voluntate creantis;” cited in *The Cosmos*, 327-328; *Le Cosmos*, 124.

²³ *The Cosmos*, 330. “Plus une créature est parfaite, plus elle est une et simple. L’homme est plus simple que l’animal et plus un; l’animal est plus simple et plus un que la plante, etc. Or plus les êtres sont uns et parfaits, plus ils sont vestiges ou images de la Trinité. De même que les anges sont plus à l’image de la Trinité que les hommes, de même l’animal en est un vestige plus profond que la plante et l’inorganique. Et par là, les êtres infrahumains, dans la mesure où ils tendent vers l’homme, tendent aussi, en tant qu’ils sont des vestiges de plus en plus profonds, vers l’image de la Trinité qu’est l’âme humaine. À ce point de vue, nous pouvons considérer l’évolution du cosmos comme une maturation de vestiges qui se terminera à une image de la Trinité” (*Le Cosmos*, 126).

²⁴ *The Cosmos*, 327. “Nous le représentons dans sa forme et dans son espèce –*secundum formam et secundum speciem*” (*Le Cosmos*, 124).

animal knowledge or sensible affectivity, but we must say that God is formally intellect and will. What preserves the image of the Trinity in us is intellect and will which are also essential and formal attributes of the divine nature. Since we are made in the image of God, we represent Him in His form and species—*secundam formam et secundam speciem*.²⁵

The only cosmic creatures able to represent God according to form and species are humans because they alone have intellect and will, as does God.

The cosmos completes its return journey to the creator, who draws it toward Himself through the lower degrees of being with their trace likenesses to Him, until man is produced, who is made formally to the image of the Trinity. “In evolution, the Trinity draws the world to itself in order to imprint on it its image.”²⁶

4. Generation of the Word and Natural Generation

De Koninck could have named the last section of the book “Impulse towards the Generation of the Word.” He begins this section by paraphrasing St. Thomas’s definition of generation. He shows how it applies to animal reproduction; then he shows how it applies to the generation of the Word in the Trinity. Finally, he shows how evolution brings about more perfect types of generation until it brings forth human generation, which is the cosmic generation that is closest to the divine.

De Koninck states, “Generation in the most rigorous sense [is] the procession of a living being from a living being which is joined to it as principle of life and which assimilates it to its very nature in virtue of this very procession.”²⁷

²⁵ *The Cosmos*, 327. “L’intelligence et la volonté sont... formellement en Dieu, et non pas seulement d’une manière virtuelle. On ne pourrait en dire autant de la connaissance animale et de l’affectivité sensible: on ne peut pas dire de Dieu qu’il a la connaissance sensible, ou l’affectivité sensible; mais il faut dire que Dieu est *formellement* intelligence et volonté. Ce qui sauve l’image de la Trinité en nous, c’est l’intelligence et la volonté qui sont aussi des attributs essentiels et formels de la nature divine. Par là nous sommes faits à l’image de Dieu, nous le représentons dans sa forme et dans son espèce – *secundum formam et secundum speciem*” (*Le Cosmos*, 124).

²⁶ *The Cosmos*, 330. “Dans l’évolution, la Trinité tire à soi le monde afin de lui imprimer son image” (*Le Cosmos*, 126).

²⁷ *The Cosmos*, 330-331. “Génération au sens le plus rigoureux: *origo, viventis a vivente a principio vitae conjuncto in similitudinem naturæ*: la procession d’un vivant à partir d’un vivant qui lui est conjoint comme principe de vie et qui l’assimile à sa propre nature en vertu de cette procession même” (*Le Cosmos*,

Next he applies this definition to natural generation. The first phrase, “The procession of a living being from a living being,” refers to a father as living and efficient cause of his son. A father generates his son.

The second phrase, “which is joined to it as principle of life,” refers to the material cause from which the son comes. The father forms his son from his own substance, from his seed.

The third phrase, “which assimilates it to its very nature in virtue of this very procession,” refers to the final and formal cause of the process, the likeness of specific nature between the father and son. The goal of the generation is reproduction of the nature of the father. What specifies it as a particular kind of act, i.e. gives it its form, is the specific form of the son inasmuch as it is like the father’s.

Generation is not always used with this meaning. It is also used in a common way to designate any change from non-being to being. Even when there is a procession in living things, it is not always generation, taken strictly. Hair proceeds from a living animal but it is not strictly generation because there is no likeness of specific nature.

In evolution, when one organism generates another organism that differs from it specifically (i.e. a mutated offspring), De Koninck says there would not be generation in the strict sense because there would not be likeness to the specific nature of the generator in the mutated offspring. “Mutations are equivocal generations where the terms do not communicate in the same species.”²⁸ However, if the *term* of the generation is considered, a generation that results in an organism of a higher species than the generator is a more perfect form of generation, De Koninck says, since the perfection of a process is judged by its completion or product, if it has one. So, for example, although one composer might compose a symphony more swiftly than another, the process of composition is judged by the beauty of the symphony produced not by the speed of

127). Taken from discussion of generation in *ST I* 27.2: “generatio significat originem alicuius viventis a principio vivente coniuncto... quod procedat secundum rationem similitudinis in natura eiusdem speciei.”

²⁸ *The Cosmos*, 331. “Les mutations sont des générations équivoques où les termes ne communiquent pas dans une même espèce” (*Le Cosmos*, 128).

composition. The apparent biological parents in generations that result in higher mutated progeny are not proper generators; they are only instruments of the equivocal cause. Nevertheless, since the term, the specifically new progeny, is higher, the generation is a more perfect process than one in which the same parents generate progeny specifically like themselves.

Within generation according to the strict sense, as in giraffes generating giraffes and men generating men, there is also contained generation in the common sense, for the baby passes from non-being to being while it comes to be of the same specific nature as the generator. Thus, according to De Koninck, there are three things to consider in natural generation: the generators (i.e. the parents), which are the active principle, the matter (i.e. the sperm and egg), which is the passive principle, and the generated (the baby), which is the term of the generation and is also in act.

The passive principle is the cause of the imperfection of the generation. “The assimilation of the generator and engendered will be defective in the measure that they are separated by the potentiality of an intermediate term.”²⁹ The generation is not perfectly interior to the generator; the generator is not able to give its very own form, in number, but only a likeness to it. The child is a separate substance from the parent. Yet it is not necessary that the generator and the engendered be separated by an intermediate term. De Koninck considers what a generation would be like that did not entail an intermediate term of potentiality.

But let us suppose a living being which does not proceed from potency to act, which proceeds immediately from the activity alone of the generating principle: he will have the second sort of generation without the first, that is, without the imperfection that an intermediate element introduces, namely, the potentiality from which the engendered is drawn. There will be a generation in the full sense: there will be perfect similitude in the very assimilation and in the source; there will be both propagation of nature and absolute identity of nature: the nature will be expressed in itself.³⁰

²⁹ *The Cosmos*, 332. “L’assimilation du générateur et de l’engendré sera défectueuse dans la mesure où ils sont séparés par la potentialité d’un terme intermédiaire” (*Le Cosmos*, 128).

³⁰ *The Cosmos*, 332. “Mais supposons un vivant qui ne procède pas de la puissance à l’acte, qui procède immédiatement de la seule actualité du principe générateur: il aura la seconde sorte de génération sans la première, c’est-à-dire sans comporter l’imperfection qu’introduit l’élément intermédiaire, à savoir la potentialité dont on tire l’engendré. Il y aura génération au sens le plus plein: il y aura similitude parfaite

This is the kind of generation that exists in the Trinity, according to De Koninck. The generation of the Son or Word in the Trinity is a perfect generation in the strict sense of generation without the imperfections that accrue from an intermediate element of potentiality. It is not a generation in the broader sense of generation because there is no passage from non-being to being. The Word is not formed from matter or potentiality. However, the Word's generation does fulfill every element in the definition for generation in the strict sense. The Word is a living being proceeding from a living being by an operation of life, since He proceeds by the operation of the intellect forming a concept, which is a vital operation. He is conjoined to His generator, since He and the Father are both identical to the divine essence; they are one in substance. The procession is by way of likeness because the concept of the intellect is a likeness of the object understood. The Son, or Word, shares the specific nature of His generator, the Father, because in God intellect and essence are the same.

Generation comes from the richness of the divine nature. It belongs to the perfection of knowledge to express the thing known. "The opposition between the Person of the Father and the Person of the Son is thus born from the fruitfulness of the divine nature."³¹ The perfect numerical identity of nature belonging to the divine persons comes from the perfection of the divine knowledge, since the more perfect knowledge is, the more it is one with the knower. Therefore since divine knowledge is absolutely perfect, the Father who conceives must be absolutely one with the Word conceived. They not only have the same nature specifically but numerically. The Father is God and the Son is God. The only difference is that the Father is God as begetter and the Son is the same God as begotten (having received all that He is from the Father).

Now we can look at the immense differences between divine and natural generation. De Koninck explains, "Divine generation, indeed, has its source in the absolute plenitude of the

dans l'assimilation même et dans la source; il y aura à la fois propagation de nature et identité absolue de nature: la nature s'exprimera dans elle-même" (*Le Cosmos*, 128).

³¹ *The Cosmos*, 332. "L'opposition entre la Personne du Père et la Personne du Fils naît ainsi de la fécondité de la nature divine" (*Le Cosmos*, 129).

divine nature. Natural generation, on the contrary, makes up for the imperfection of cosmic natures...Generation makes up for their corruptibility.”³² Divine generation comes from the *richness* and fruitfulness of divinity. It is entirely spiritual and immanent; it involves no potentiality, no imperfection, and no separation of generator and generated. Natural generation comes from the *poverty* of cosmic organisms. The only way they can avoid extinction is by living on in their progeny. They make up, in some way, for their mortality by preserving their species in reproduction. They can only reproduce by using matter, which is potency (imperfect being).

Organisms multiply themselves numerically but this cannot be an end since pure multiplication is indefinite. Nothing indefinite can be a goal. Nor can perfect similarity be the goal since there is never perfect similarity in sexual reproduction, which is the highest form of cosmic reproduction. Just as the poverty of every creature in reflecting God is made up for by the variety of creatures, so the poverty of each species is made up for by a variety of individuals, De Koninck says. “Humanity does not aim at the reproduction of perfectly similar and homogeneous individuals. Its imperfection is made up for by a certain variety. And we even see that the more perfect individuals are, the more they differ from one another.”³³ The higher the species, the more diverse are the individuals in it. St. Catherine of Siena differs more from St. Thérèse of Lisieux than one ant from another.

But, although natural generation is impoverished compared to divine generation, it is still perfection and fruitfulness. However, De Koninck says, this fruitfulness does not rest in itself; it is for the sake of an end. “Matter, indeed, which makes natural generation possible, is not a pure negation: it is for the perfection of form. If the form were perfect in its species, natural generation

³² *The Cosmos*, 333. “La génération divine, en effet, a sa source dans la plénitude absolue de la nature divine. La génération naturelle, au contraire, supplée à l’imperfection des natures cosmiques... la génération supplée à leur corruptibilité” (*Le Cosmos*, 129).

³³ *The Cosmos*, 333. “L’humanité ne vise pas la reproduction d’individus parfaitement semblables et homogènes. Il faut qu’elle supplée à son imperfection par une certaine variété. Nous voyons même que plus les individus sont parfaits, plus ils sont différents entre eux” (*Le Cosmos*, 130).

would be impossible.”³⁴ Nature uses matter, which is for the sake of form, to produce many and various forms until it produces the form of man. If it could produce a perfect form, no further generation would be possible. The angels, who are perfect subsistent forms, cannot reproduce. Man, too, because his soul is a subsistent spiritual form, cannot by his own natural power generate a new human being. God must create the new soul. And yet, even though it requires an extra-cosmic principle, human generation is the most perfect cosmic generation because it results in the most perfect term. It is more perfect than any sub-rational generation where the generated is contained completely in the powers of the generator and matter, because the end or completion of the process is a person with an immortal rational soul. Thus evolution tends toward the most perfect generation possible in the cosmos, the generation of the human being.

De Koninck ends this section with the following paragraph, which points to a great difference between divine and human generation.

The term of the divine generation is a Word. We of course see that the mental word which is born in us by the intimate act of our thought is not a child and that its production is not a generation. Indeed, our mental word is not of the substance of our self; there is no similitude of nature. Intelligence in us, as in every intellectual creature, is distinct from our substance, and the mental word is not intelligence itself. If our knowledge of ourselves is in a sense consubstantial, substance is the root of intelligence and intelligence can know substance, yet, intelligence and substance are really distinct.³⁵

De Koninck notes that while God the Father generates His Son by forming a mental Word, human intellectual operations are separate from reproduction. Our concepts are not persons. They do not subsist. Nor are they identical with our intellect or our substance. In God, there is thus perfect generation and interiority in the procession of the Word. God not only knows Himself through Himself, but His act of knowing is the same as His act of being. Thus God is Himself the

³⁴ *The Cosmos*, 333. “La matière, en effet, qui rend possible la génération naturelle, n’est pas une pure négation: elle est pour la perfection de la forme. Si la forme était parfaite dans son espèce, la génération naturelle serait impossible” (*Le Cosmos*, 130).

³⁵ *The Cosmos*, 334. “Le terme de la génération divine est un Verbe. Or, nous voyons tout de suite que le verbe mental qui naît en nous de l’acte intime de notre pensée n’est pas un fils et que sa production n’est pas une génération. En effet, notre verbe mental n’est pas de la substance de notre moi: il n’y a pas de similitude de nature. L’intelligence est en nous, comme en toute créature intellectuelle, distincte de notre substance, et le verbe mental n’est pas l’intelligence elle-même. Si notre connaissance de nous-mêmes est en un sens consubstantielle, en effet, la substance est la racine de l’intelligence et l’intelligence peut connaître la substance, pourtant, l’intelligence et la substance sont réellement distinctes” (*Le Cosmos*, 130).

object known, the intelligible species by which he is known, His own act of understanding and His act of being. God's spiritual fruitfulness is perfectly interior and at the same time, in this perfect unity, there is generation of a subsisting being, to whom the Father gives His own nature.

The galley proofs end at this point.³⁶ The next two sections were discovered in handwritten notes in French in the Charles De Koninck Archive at Notre Dame.

5. The Impulse of the Holy Spirit in the Maturation of the World

Not only is there a trace of the procession of the Word in the Cosmos, according to De Koninck, but there is also a trace of the procession of the Holy Spirit. "But also to be found in the cosmos is a trace of the procession of the Holy Spirit, and more particularly in the mutations, which, from the ontological point of view, are brought about by impulse."³⁷

The Holy Spirit's procession is not properly generation, De Koninck tells us in the following passage that he cites from St. Thomas, because it is a procession of will rather than of intellect. Since the intellect brings forth a likeness of the thing known when it frames a concept, its activity can be called generation, "for the generator generates his like." The will, on the other hand, does not bring forth a *likeness* of the thing loved but a "*vital movement and impulse*" toward it.

What proceeds in God according to love does not proceed as what is engendered, or as a son, but rather as "spirit" where the "name" *spirit* reveals a vital movement and impulse; thus we say that a

³⁶The Charles De Koninck Archive in the Jacques Maritain Center at the University of Notre Dame contains a list of the subdivision titles of the "Theological Section." There are five additional titles besides the first four that are in the galley proofs and the published versions of *The Cosmos*: "The Impulse of the Holy Spirit and Cosmic Evolution;" "Divine Fruitfulness and Fruitfulness in the Cosmos;" "In principio creavit Deus caelum et terram;" "The morning and evening knowledge of the angels;" "The work of the "six days;" and "Other Things." There is a rough handwritten version of the fifth subdivision in the archive, "The Impulse of the Holy Spirit in the Maturation of the World," which was to follow the subdivision on "Generation of the Word and Natural Generation." Half of it seems to belong to the sixth section "Divine Fruitfulness and Fruitfulness in the Cosmos," although it has no title. The other subdivisions have not been found. I have placed a copy of the subdivision titles in Appendix 1 and a copy and translation of the two newly found subdivisions in Appendices 2 and 3.

³⁷"The Impulse of the Holy Spirit in the Maturation of the World." "Mais il y a aussi dans le cosmos un vestige de la procession du Saint-Esprit et plus spécialement dans les mutations, qui, au point de vue ontologique, sont suscitées par impulsion" ("L'Impulsion du Saint-Esprit dans la Maturation du Monde," Appendix 2).

person is moved and pushed, lifted up, by love.³⁸

The Holy Spirit proceeds from the Father not as a likeness of the divine nature, but as an inclination toward the divine nature as perfect goodness.

There is, however, also a likeness involved in loving, De Koninck tells us, since knowledge is the cause of love. Persons can only love what they know.

The fact of being inclined presupposes a certain likeness, as we have seen. But the mental word that is the fruit of thought and love possess in diverse ways the likeness of their principle: the word possesses it because it is itself the likeness of the thing known...on the other hand, love possesses the likeness of the object willed, not in the sense that it is the likeness of the thing loved, but because it finds in the likeness... its cause.³⁹

The intellect is like its object because it contains the object's image or intelligible form, by which it knows it; the will is like the object loved, because the object is impressed on it as the final cause or end impelling it to movement toward the beloved or to rest in the beloved with joy.

A sign of there being a procession or a coming forth of something in the will, as De Koninck following St. Thomas describes it, is the way people speak of their beloved or their home as being *in* their heart. In the novel, *A Little Princess*, a father is saying good-bye to his daughter Sara before leaving London for India.

"Are you learning me by heart, little Sara," he said, stroking her hair.

"No," she answered. "I know you by heart. You are inside my heart." And they put their arms round each other and kissed as if they would never let each other go.⁴⁰

³⁸ "Impulse of the Holy Spirit." "ce qui procède en Dieu selon l'amour, ne procède pas comme engendré, ou comme fils, mais plutôt comme "esprit": or le "nom"- *esprit*- révèle une motion- et une impulsion vitales; ainsi nous disons qu'une personne est mue et poussée, soulevée, par amour" ("L'Impulsion du Saint-Esprit," Appendix 2). Cf. *ST I* 27.4: "Processio amoris in divinis non debet dici generatio. Ad cuius evidentiam, sciendum est quod haec est differentia inter intellectum et voluntatem, quod intellectus fit in actu per hoc quod res intellecta est in intellectu secundum suam similitudinem, Processio autem quae attenditur secundum rationem voluntatis, non consideratur secundum rationem similitudinis, sed magis secundum rationem impellentis et moventis in aliquid. Et ideo quod procedit in divinis per modum amoris, non procedit ut genitum vel ut filius, sed magis procedit ut spiritus, quo nomine quaedam vitalis motio et impulsio designatur, prout aliquis ex amore dicitur moveri vel impelli ad aliquid faciendum."

³⁹ "Impulse of the Holy Spirit." "le fait de s'incliner présuppose une certaine similitude, comme nous l'avons vu. Mais le verbe mental, le fruit de la pensée, et l'amour, possèdent diversement la similitude de leur principe: le verbe la possède en ce qu'il est lui-même la similitude de la chose connue... au contraire l'amour possède la similitude de l'objet voulu non pas en ce qu'il est la similitude de la chose aimée, mais en ce qu'il trouve dans la simili... sa cause" ("L'Impulsion du Saint-Esprit," Appendix 2).

⁴⁰ Frances Hodgson Burnett, *A Little Princess* (Boston: David R. Godine, Publisher, 1989), 16.

Sara's father is present in her mind and memory by a likeness, but he is also present in her heart or will by affection. There is a procession of impulse or reaching toward the beloved in the will's activity of loving. This impulse is a kind of presence of the beloved in the lover.

St. Thomas often refers to the maxim, "The beloved is in the lover." For example, in a question about the effects of the Holy Spirit, he writes, "Therefore, since we are made lovers of God by the Holy Spirit, and *every beloved is in the lover as such*; the Father and the Son necessarily dwell in us also, by the Holy Spirit."⁴¹ St. Thomas says that since the Holy Spirit makes us lovers of God, then when the Spirit dwells in us, all three divine persons are in us because each is the same one God whom we love. They are present as the beloved is present in the heart of the lover.

In addition De Koninck explains why the name *Spirit* is given. Since the divine procession of knowledge implies likeness in the one proceeding, the procession is rightly called generation and the person proceeding is called Son as well as Word; whereas the divine procession of love implies movement or impulse and so the person proceeding is called Spirit.

What proceeds in God according to love does not proceed as what is engendered, or as a son, but rather as "spirit" where the "name" *spirit* reveals a vital movement and impulse; thus we say that a person is moved and pushed, lifted up, by love. The Latin substantive *spiritus* carries with it, in material things, the idea of impulse and movement, for it is used to designate breath and wind. What is proper to love is to push and to drag along the will of the one who loves towards the beloved object.⁴²

The name *spirit* comes from breath or wind and so is appropriate for the Holy Spirit who proceeds as love, which is a movement of the will. For this reason, De Koninck attributes evolution to the Holy Spirit. He has argued that evolution is powered by an *impulse* toward thought, consubstantial love, gift-of-self, beauty, and image of God. Since the Holy Spirit

⁴¹ SCG IV 21.2: "Cum igitur per spiritum sanctum Dei amatores efficiamur; *omne autem amatum in amante est, inquantum huiusmodi*: necesse est quod per spiritum sanctum pater etiam et filius in nobis habitent."

⁴² "The Impulse of the Holy Spirit." "ce qui procède en Dieu selon l'amour, ne procède pas comme engendré, ou comme fils, mais plutôt comme "esprit": or le "nom"- *esprit*- révèle une motion- et une impulsion vitales; ainsi nous disons qu'une personne est mue et poussée, soulevée, par amour. Le substantif latin *spiritus* emporte, dans les choses matérielle, l'idée d'impulsion et de mouvement; car on l'emploie pour désigner le souffle et le vent. Or le propre de l'amour est de pousser, et d'entraîner la volonté de celui qui aime vers l'objet aimé" ("L'Impulsion du Saint-Esprit," Appendix 2).

proceeds as impulse and vital movement, De Koninck attributes the cause of mutations and the ascent toward more perfect life forms to the Holy Spirit. “Clearly we find a trace of this procession by impulse, which is not at all a generation, in the calling forth of new species: we can even say more. We can attribute the rise of life in our universe to the Holy Spirit.”⁴³ Just as natural generation is a trace of the generation of the Son, so, De Koninck maintains, mutation, or the genesis of a higher organism from a lower, is a trace of the procession of the Holy Spirit and can be attributed to Him.

De Koninck uses the word “attribute,” [attribuer] in the sentence “We can *attribute* the rise of life in our universe to the Holy Spirit.”⁴⁴ *Attribuer* could mean appropriation or proper and personal attribution. Appropriation has a technical theological meaning. To attribute by appropriation is to assign a work to one person of the Trinity because it bears a certain likeness to what is proper to that divine person, even though it is in fact the work of the whole Trinity. Thus creation is attributed to the Father, because to create is to be the origin of all creatures, which is like the proper notion of the Father who is the origin, without origin, of the Trinity. De Koninck attributes the role of impelling evolution, at least by appropriation, to the Holy Spirit. He does so because evolution is a process drawn by love of the human soul and the Holy Spirit proceeds as Love. Koninck may have wished to imply more; namely, that the Holy Spirit has a personal role in impelling evolution. However, the references he gives to St. Thomas do not make that clear. They can all be interpreted as appropriation.

De Koninck refers to a comment of St. Thomas on the passage, “The Spirit of God was moving over the face of the waters,” in Genesis 1:2.

By the words “Spirit of the Lord” Scripture usually means the Holy Spirit, who is said to “move over the waters,” not bodily, but as the craftsman’s will may be said to move over the material

⁴³ “The Impulse of the Holy Spirit.” “Or, manifestement nous trouvons un vestige de cette procession per impulsion qui n’est point une génération, dans la suscitation de nouvelles espèces vivants dans le cosmos” (“L’Impulsion du Saint-Esprit,” Appendix 2).

⁴⁴ “The Impulse of the Holy Spirit.” “Nous pouvons attribuer l’ascension de la vie dans notre univers, au saint esprit” (“L’Impulsion du Saint-Esprit,” Appendix 2).

which he wishes to form.⁴⁵

According to St. Thomas, the Holy Spirit moves by an impulse of will over the matter that He intends to shape into a certain form. In another passage, St. Thomas says that it is attributed to the Holy Spirit that He “produced the different species out of formless created matter.”⁴⁶

It is also from the fact that the Holy Spirit proceeds by way of love—and love has a kind of driving and moving force—that the movement which is from God in things seems properly to be attributed to the Holy Spirit. Of course, the first existing mutation [mutatio] in things from God is understood to be this: He produced the different species out of formless created matter. Hence, this work is what sacred Scripture attributes to the Holy Spirit. For we read in Genesis (1:2): “The Spirit of God moved over the waters.” For by “waters” Augustine wants one to understand prime matter over which the Spirit of the Lord is said to be borne, not as though He Himself is moved, but because He is the principle of the movement.⁴⁷

Thus, according to St. Thomas, the Holy Spirit brings forth the original species from the first matter. If the formless created matter is understood as prime matter, then the production of the species would be simultaneous with the creation of prime matter; if the formless matter is understood as the first already formed matter under its most primitive form such as a fireball of pulsing radioactivity or “a sea of identical strings...some primitive abstract substratum,”⁴⁸ as is thought today, then the production of additional species could involve immense periods of cosmic time.

The government of things by God is understood to be according to a kind of motion, in that God directs and moves all things to their proper ends. If, then, impulse and motion belong to the Holy Spirit by reason of love, the government and *propagation* of things is fittingly attributed to the Holy Spirit. Hence Job says: “The Spirit of God made me” (Job 33:4); and the Psalmist: “Thy

⁴⁵ ST I 66.1 ad 5: “quia spiritus domini in Scriptura non nisi pro spiritu sancto consuevit poni. Qui aquis superferri dicitur, non corporaliter, sed sicut voluntas artificis superfertur materiae quam vult formare.”

⁴⁶ SCG IV 20.3: “ex materia creata informi species diversas produxit.”

⁴⁷ SCG IV 20.3: “Ex hoc etiam quod spiritus sanctus per modum amoris procedit; amor autem vim quandam impulsivam et motivam habet: motus qui est a Deo in rebus, spiritui sancto proprie attribui videtur. Prima autem mutatio in rebus a Deo existens intelligitur secundum quod ex materia creata informi species diversas produxit. Unde hoc opus spiritui sancto sacra Scriptura attribuit: dicitur enim Gen. 1-2: spiritus domini ferebatur super aquas. Vult enim Augustinus per aquas intelligi materiam primam super quam spiritus domini ferri dicitur, non quasi ipse moveatur, sed quia est motionis principium.”

⁴⁸ Davies, *Cosmic Blueprint*, 125: “As the temperature reaches the so-called Planck value...all matter is dissociated into its most primitive constituents, which may be simply a sea of identical strings...As the temperature is raised, so there is less and less structure, form and distinction among particles and forces. In the extreme high-energy limit [of the beginning explosion], all of physics seems to dissolve away into some primitive abstract substratum.”

good spirit shall lead me into the right land” (Ps. 142:10).⁴⁹

According to St. Thomas, the Holy Spirit is guiding and moving all the parts of the Cosmos in the propagation of living organisms. De Koninck takes that to imply that the Holy Spirit causes the propagation of each species at the right moment in order to bring forth humanity, the goal of nature, at the appropriate time.

Life also is especially manifested in motion, for we say that self-moving things live and in general we say this of everything which puts itself into operation. If, then, by reason of love, drive and motion are suited to the Holy Spirit, life is also suitably attributed to Him. For John (6:64) says: “It is the Spirit who gives life”; and Ezekiel (37:5): “I will send Spirit into you, and you shall live”; and in the Creed of our faith we profess to believe in the Holy Spirit, “the giver of life.” This also harmonizes with the name “Spirit.”⁵⁰

De Koninck would interpret the passage to mean that the Holy Spirit gives life to every living thing. He gives life for the first time in biogenesis when He produces the original organisms from the primal soup. From then on, He directs every generation of a living thing from a living thing, bringing forth like from like in univocal generations and more perfect species from less perfect species in the equivocal generations that produce specifying mutations.

It may be argued that impelling the rise of life is not only *appropriated* to the person of the Holy Spirit. The Father and the Son cause the rising of life and love and impulse in creation through the Holy Spirit because it is His personal property to be the Love from the Father and Son by which they will to communicate life and love to all the living; just as the Father creates through the Son because it is a personal property of the Word, which He received from the Father, to be the exemplar cause of creatures from the Father.⁵¹

⁴⁹ SCG IV 20.4: “Rerum gubernatio a Deo secundum quandam motionem esse intelligitur, secundum quod Deus omnia dirigit et movet in proprios fines. Si igitur impulsus et motio ad spiritum sanctum ratione amoris pertinet, convenienter rerum gubernatio et propagatio spiritui sancto attribuitur. Unde Iob 33-4 dicitur: *spiritus domini fecit me* et in Psalmo: *spiritus tuus bonus deducet me in terram rectam*.”

⁵⁰ SCG IV 20.6: “Vita maxime in motu manifestatur: moventia enim seipsa vivere dicimus, et universaliter quaecumque a seipsis aguntur ad operandum. Si igitur ratione amoris spiritui sancto impulsio .et motio competit, convenienter etiam sibi attribuitur vita. Dicitur enim Ioan. 6:64, *spiritus est qui vivificat*; et Ezech. 37:6, *dabo vobis spiritum et vivetis*, et in symbolo fidei nos in spiritum sanctum vivificantem credere profiteamur. Quod etiam et nomini spiritus consonat: nam etiam corporalis vita animalium est per spiritum vitalem a principio vitae in cetera membra diffusum.”

⁵¹ This discussion owes much to the analysis of Gilles Emery about the distinct and proper modes of action of the divine persons. Gilles, Emery, “The Personal Mode of Trinitarian Action in St. Thomas” in

Gilles Emery writes about the act of the Holy Spirit in “communicating to human beings the impulsion of love that gives them their union to God.”⁵² He argues that this activity belongs to the Holy Spirit in the mode proper to His person because He is personally the love proceeding from the Father and Son.

On the part of the Holy Spirit, the mode of action comes from his personal property as *Love*. The Holy Spirit is properly and personally the love who proceeds from the Father and the Son. Existing personally as Love (St. Thomas accounts for this personal property through the analogy of the “impression” or the “affection” of love in the will). The Holy Spirit acts in the mode of the Love of the Father and the Son, in communicating to human beings the impulsion of love that gives them their union to God: He spreads charity, that is, communicates a participation in his personal property, obtaining consolation and joy (which belongs formally to the Spirit as Love).⁵³

Emery is not arguing simply from the effect, charity, to the Trinitarian person, the Holy Spirit or Love, but from the Holy Spirit’s relation to the other divine persons to his mode of being the cause of this effect. It is because the Holy Spirit proceeds from the Father and Son eternally as Love that the Father and Son bring about the created effect of spreading love through the Holy Spirit. Similarly, one might argue that it is because the Father and Son breathe forth the Holy Spirit as Love and impulse, that they impel evolution through the Holy Spirit. Thus each divine person causes the ascension of evolution according to His mode of existence. The Son acts in the mode of the Word-from-the-Father in being the archetype through which the Father creates. The Spirit acts in the mode of Love-from-Father-and-Son in communicating to organisms the impulsion of love for the human form which He receives together with His being from the Father and the Son that causes organisms to bring forth mutated progeny of higher and higher species in an effort to reach thought and love in humanity.

It is not clear that De Koninck calls this evolutionary activity of the Holy Spirit proper and personal, but even if he only wishes to attribute the ascension of life to the Holy Spirit by appropriation, it indicates the profound significance of love for the meaning and mechanism of evolution, as De Koninck understands it.

Trinity, Church, and the Human Person: Thomistic Essays. (Naples, Florida: Sapientia Press of Ave Maria University, 2007), 145-153. Henceforth called “Personal Mode.”

⁵² Emery, “Personal Mode,” 142.

⁵³ Emery, “Personal Mode,” 142.

6. Divine Fruitfulness

The Trinitarian processions reveal the fruitfulness of God.⁵⁴ De Koninck says, “It is in the generation of the Word and in the breathing-forth of the Holy Spirit that is manifest the absolute fruitfulness of God.”⁵⁵ Furthermore, God gives a share in this fruitfulness to all being. “We find a trace of this fruitfulness in all the degrees of being insofar as every created being necessarily contains a trace of the Holy Trinity.”⁵⁶ Created fruitfulness increases in higher creatures as the emanations become more interior. “This generating and impelling fruitfulness of nature tends basically to the fruitfulness of the spirit—thought and intellectual love—a fruitfulness that is so great that it remains interior to the subject: nature tends towards immanent fruitfulness. And in that respect this fruitfulness is not only a trace, but an image of the Trinity.”

While natural fruitfulness already attains to the level of image in man in virtue of his rational nature, there is still a higher kind of fruitfulness in man, spiritual fruitfulness. According to De Koninck, human generation or reproductive fruitfulness is always for the sake of spiritual fruitfulness. A sign of this is that reproduction will end in heaven, because it will have reached its goal. “In the resurrection they neither marry nor are given in marriage, but are like angels in heaven” (Mt 22:30). There will be the predestined number of saints communicating in their union with God, overflowing with spiritual fruit. De Koninck writes of the intense communion of the saints with one another in their common joy in God and in His being possessed by all of them together. “This union is the most profound, for it is not merely an effect of the termination of the vision and love of the Blessed in the same object and good, but it is founded also in the fact that

⁵⁴ De Koninck, “Divine Fruitfulness ” (“La Fécondité Divine;” Appendix 3). This is another fragment from the Archives, eight pages of handwritten notes in French. They seem to be intended for the sixth section of the theological section, although they are unnamed and were with the pages titled, “The Impulse of the Holy Spirit.”

⁵⁵ “Divine Fruitfulness.” “C’est dans la génération du verbe et la spiration du Saint Esprit que se manifeste la fécondité absolue de Dieu” (“La Fécondité Divine,” Appendix 3).

⁵⁶ “Divine Fruitfulness.” “Nous retrouvons un vestige de cette fécondité à tous les degrés de l’être dans la mesure où tout être créé contient nécessairement un vestige de la Sainte Trinité” (“La Fécondité Divine,” Appendix 3).

the object and the good are attained and adhered to in their very universality.”⁵⁷ For this reason the state of virginity is not perverse because it is not a rejection of fruitfulness but the embrace of a higher fruitfulness, closer to God’s fruitfulness in the processions of the Trinity. “You did not choose me, but I chose you that you should go and bear fruit and that your fruit should abide” (Jn 14:16).

De Koninck brings up a natural objection. Human spiritual fruitfulness does not generate a child the way the Divine Father generates the Son; isn’t human generation of a child higher and more like divine generation than the human conception of a word? Human procreation has more exteriority than knowledge, but it results in perfect likeness of nature, another human existing in the ontological order rather than a concept existing in the intentional order. “Should it not be necessary to conclude that we imitate the Trinity more in generation than in thought? And in order that this particular fruitfulness of the Trinity might remain in the world, would it not be necessary to pursue natural generation forever?”⁵⁸

De Koninck answers this objection by saying that natural fruitfulness is a perfection appropriate for a lower being; it is more perfect than spiritual fruitfulness of humans and angels, in a certain respect, because it results in a child. However, it is not more perfect absolutely. He gives the example of a horse. The horse can run faster and longer than man; in this respect the horse is more perfect than man. However this speed requires the body of a lower animal. The body appropriate for a rational animal should not have such powerful thighs and legs. In a similar

57 Charles De Koninck, *In Defense of St. Thomas: A Reply to Father Eschmann’s Attack on “The Primacy of the Common Good,”* in *The Writings of Charles De Koninck* vol. 2, trans. and ed. Ralph McInerny (Notre Dame, Indiana: University of Notre Dame Press, 2008) 314. (Henceforth, referred to as *In Defense of St. Thomas*. “Cette union est la plus profonde car elle n’est pas simplement l’effet de ce que la vision et l’amour des Bienheureux s’achèvent dans le même objet et le même bien; elle repose aussi sur le fait que l’objet et le bien sont atteints et aimés dans leur universalité même” (*Pour La Défense de Saint Thomas*, 326). Henceforth referred to as *Pour La Défense*.

58 “Divine Fruitfulness.” “Ne faudrait il pas en déduire que nous imitons davantage la Trinité dans la génération que dans la pensée? Et afin que ce vestige particulier de la Trinité demeure dans le monde, ne faudrait il pas poursuivre la génération naturelle pour toujours?” (“La Fécondité Divine,” Appendix 3).

way, “natural fruitfulness is easier and more certain than spiritual fruitfulness, but this does not prevent the latter from being purely and simply more perfect.”⁵⁹

CDK says this because natural fruitfulness belongs to humans and not angels because of human imperfection; humans die and need to be replaced. Procreation results in an indefinite number of imperfect individuals, but something indefinite could never be a final goal. The progeny are, in their turn, for the sake of their end, union with God, which is the result of their spiritual fruitfulness. Spiritual fruitfulness flows from the interior processions of knowing and loving; these result in union with an infinitely perfect object, God. Hence physical fruitfulness, which will end with this world, is for the sake of spiritual fruitfulness, which unites humans to Infinite Goodness forever.

The most profound reason that the perpetuation of the processes of natural generation is impossible is because natural generation considered from the point of view of duration, would tend to the indefinite. Now the indefinite cannot be an end. Generation is therefore entirely functional and provisional.⁶⁰

A second sign that natural generation is lower than spiritual generation is that human generation is only perfect when the conjugal act springs from and increases spiritual communion of the parents. “The love of the married pair, as conjugal...should be great and ‘liberal’... a thing which cannot help but favor the good of the child, to whom the love of his parents for each other is profoundly necessary.”⁶¹ The human conjugal act generates human *communion* as well as children. The spousal communion is a sacrament making Christ present to the spouses. For this reason, the conjugal act is not perverse when performed when the wife is not fertile. The conjugal act ends when spiritual communion is made perfect in heaven.

⁵⁹ “Divine Fruitfulness.” “La fécondité naturelle est plus faciles et plus certaine que la fécondité spirituelle: mais cela n’empêche pas que celle-ci ne soit purement et simplement plus parfaite” (“La Fécondité Divine,” Appendix 3).

⁶⁰ “Divine Fruitfulness.” “La raison profonde pour laquelle la perpétuation des processus de génération naturelle est impossible- c’est que la génération naturelle considérée sous le rapport de la durée, tendrais vers l’indefini. Or, l’indefini ne peut être fin. Elle est donc touché entière fonctionnelle et provisoire” (“La Fécondité Divine,” Appendix 3).

⁶¹ Charles De Koninck and Monsignor Maurice Dionne, *The Question of Infertility*; Memorandum, Quebec, 1965, 10.

A third sign that spiritual fruitfulness is greater is that the physical generation of children is useless without its completion in education. Human generation must be completed by upbringing. De Koninck says, “It is precisely by training and education of their children, rather than by the simple conferring of physical existence, that a parent most fully shares in the fatherhood of that “Father from whom all fatherhood in heaven and earth takes its title (Eph. 3:14).”⁶²

On a natural level, the parents educate the child to become a fellow citizen, able to participate in the common goods of the state: peace, justice, the arts and sciences, and the common worship of God.

On the supernatural level, marriage is for the sake of completing the body of Christ. Parents are responsible for bringing their children to the Church for Baptism and the other sacraments and for educating them in the doctrine and practice of the faith.

De Koninck writes, “This universe was created in order for the Saints to enjoy grace and glory through the intermediary of Christ and the Blessed Virgin.”⁶³ When children are baptized, they become adopted sons of God, members of the body of Christ. Human physical generation is a service to fill up the body of Christ; it will end with this life. Spiritual fruitfulness, however, will remain forever. The end must be greater than what is in service to it. Clearly physical fruitfulness is for the sake of the spiritual fruitfulness of the saints.

De Koninck prefaces the last paragraph in the fragment with a thought from St. Augustine. “St. Augustine says that God is so One that He is Trinity, and He is so Trinity that He is One. The unity shows His profound identity, the Trinity, His fruitfulness.”⁶⁴ Then De Koninck applies this maxim to the cosmic hierarchy. Beings are more perfect insofar as they are more unified and simple. Cosmic creatures become more *one*, like God, as they approach the unity of man; at the

⁶² *The Question of Infertility*, 8-9.

⁶³ *Ego Sapientia*, 19. “cet univers a été créé pour que les Saints jouissent de la grâce et de la gloire par l'intermédiaire du Christ et de la Bienheureuse Vierge” (*La Sagesse*, 61).

⁶⁴ “Divine Fruitfulness.” “Saint Augustine dit que Dieu est tellement Un qu’il est Trinité, et qu’il est tellement Trinité qu’il est Un. L’unité montre sa profonde identité, la Trinité sa fécondité” (“La Fécondité Divine,” Appendix 3).

same time they become more *three*, closer traces of the Trinity, as they approach “the psychological Trinity of the human soul, which is made to the image [and not just trace] of the divine Trinity.”⁶⁵

Now, under the relation of fruitfulness, we are able to say more about natural beings. We have seen, in effect, that from the ontological point of view, a being is perfect in the measure of its unity and of its simplicity: man is simpler than animal, and more one. Animal, in its turn, is more one than plant... Of a sort that, to the measure that natural beings are more one, they are also more traces of the Trinity. And, tending toward the unity of man, natures tend toward the psychological trinity of the human soul, which is made to the image of the divine Trinity.⁶⁶

The fragment ends with this stimulating phrase about the psychological trinity in the human soul.

7. Reason Why De Koninck never finished or published *The Cosmos*

Since De Koninck wrote *The Cosmos* in 1936 and lived until 1965, one wonders why he never finished or published it. Ralph McInerny writes, “I have no idea why *Le Cosmos* was never published. There it is in page proofs, all but ready to go. It is a great *tour de force* but perhaps De Koninck thought it premature.”⁶⁷ It may have been premature because De Koninck wished to think through the implications of his insights more deeply before making them public; or it may have been premature because he feared that Catholic theologians were not yet ready to consider any theory of evolution seriously.

Pascal Ide suggests the first possibility. De Koninck was not satisfied with *The Cosmos*. He wished to understand evolution better and develop certain insights further before publishing a major work on it.

Does not then the absence of the publication of this text of which nothing, in the first parts, leads us to suppose that it is not finished, attest that his author was unsatisfied with it, and therefore, directly and positively, that it contained in his eyes, the central intuitions that he always desired to formulate better?... “Beginnings are great,” said Plato, in the sense that they bear germinally many

⁶⁵ “Divine Fruitfulness.” “La trinité psychologique de l’âme humaine qui est faite à l’image de la Trinité divine” (“La Fécondité Divine,” Appendix 3)

⁶⁶ “Divine Fruitfulness.” “Or, sous le rapport du vestige, nous pouvons en dire autant des êtres naturels. Nous avons vu, en effet, qu’au point de vue ontologique, un être est parfait dans la mesure de son unité et de sa simplicité: l’homme est plus simple que l’animal, et plus un. L’animal, en son tour, est plus un que la plante etc. De sorte que, à mesure que les êtres naturels sont plus uns, ils sont aussi plus vestiges de la Trinité. Et, tendant vers l’unité de l’homme, les natures tendent vers la trinité psychologique de l’âme humaine qui est faite à l’image de la Trinité divine” (“La Fécondité Divine,” Appendix 3).

⁶⁷ *The Cosmos*, viii-ix.

of their further developments—indeed, the intuitions that their author would never be able to carry to maturity, but leaves to his attentive and benevolent readers the care of harvesting.⁶⁸

In support of this theory, one could point in particular to the theological section. Not only are the last five subdivisions not written, but even those that are written have an unfinished flavor. They consist more of citations, either annotated or not annotated, from St. Thomas without much, or sometimes any explication.

David Quackenbush suggests the second possibility. De Koninck saw how Teilhard de Chardin was forbidden to teach and banished to China for his doctrine on evolution. De Koninck had no desire to be suspected of heresy and so he prudently delayed publishing a book that was entirely on evolution. Later he did publish the most important part of it, “The Cosmos as Impulse towards Cosmic Thought.” He also published parts of it in various articles like “Reflections on Indeterminism.”

In my view, the likely reason the book was never published was that De Koninck decided that those who would read it were not ready for it. In 1936, Catholic intellectual who publicly embraced evolution were viewed with suspicion, at best. One of the greatest philosophical souls of the 20th century, [Teilhard de Chardin] whose understanding of the world was remarkably akin to De Koninck’s spent his entire productive life in various forms of banishment from the world of ideas because of those views.⁶⁹

Both reasons could also be true simultaneously. A third reason could be combined with either or both of the other reasons; De Koninck simply became immersed in other projects. Many scholars have numerous articles and almost finished books lying around waiting to be finished. Evidence for this can be seen in the numerous posthumous books and articles published by disciples or colleagues of deceased scholars. Indeed, the archives of De Koninck contain many unpublished manuscripts in a more or less finished form. It is noteworthy that the galley proofs of *The Cosmos* were prepared without the five last planned subdivisions of the Theological Section.

⁶⁸ Ide, “*La Philosophie*,” 500.

⁶⁹ David Quackenbush, (lecture at Thomas Aquinas College, Santa Paula, CA, March 11, 2011). <http://www.charlesdekoninck.com/de-konincks-cosmos>.

8. Conclusion

At this point in our exposition it will be helpful to review our path in the first step of our argument. I have presented Charles De Koninck's theory of evolution by a detailed exposition of his first book *The Cosmos*. The first chapter presented the scientific facts that persuaded De Koninck of the probability of universal common descent. He finds an unmistakable direction in cosmic history, a movement of ascent from the most primitive body at the first instant of time leading to more and more complex bodies capable of more and higher activities. He offers a striking interpretation of the mechanism of ascent; he sees it as an ascent caused by sacrifice rather than combat. The second chapter treated various philosophical concepts and principles needed to give an account of the causes of evolution. We discovered that evolution requires an understanding of noncompetitive causality. A universal cause and a particular cause do not divide responsibility for an effect. Each is responsible for the entire effect. Both a spiritual power and natural things are efficient causes of evolution. Evolution is natural because it fulfills matter's natural love for the human form. Man is the *raison d'être* of nature.

The third chapter treated the goals of evolution from a philosophical point of view. We found the ascent to man was driven by an impulse toward thought, an impulse toward love, and an impulse toward unity. These three goals already provoked us to suspect a trace of the Trinity in cosmic history. Finally we arrived at De Koninck's theological account of evolution in the fourth chapter.

In the last chapter of *The Cosmos*, De Koninck argues that evolution, like creation, while being the common work of the Trinity, belongs to each divine person in a special way according to his proper mode of existence. The Father causes evolution both through the archetypes He speaks in the Word and through the impulse of the Holy Spirit, breathed forth by Him and the Word. The goal is to produce creatures, which bear a more and more perfect imprint of the Trinity until man is produced who is made to the image of the Trinity because he has intellect and

will. The evolving cosmos bears a trace of the generation of the Son by producing creatures whose emanations approach more and more perfectly the generation of the Son until humans are produced who generate both bodily a new person (in cooperation with God) and spiritually by knowledge and love. According to De Koninck, the evolving cosmos also bears a trace of the impulse of the Holy Spirit in the equivocal generations caused by mutations and a trace of the fruitfulness of the Spirit in all natural generations leading to the image of divine fruitfulness in the spiritual fruitfulness of the saints.

Next I will take note of De Koninck's treatment of *gift-of-self* and *circularity* in chapter five and *mercy* in chapter six in order to plunge deeper into theological speculation about evolution and the Trinity in chapter seven.

CHAPTER FIVE:

GIFT-OF-SELF AND CIRCULARITY

De Koninck's doctrine on gift-of-self, circularity, and mercy plays a fundamental role in his Marian books, *Ego Sapientia*¹ and *The Piety of the Son*². These texts serve as a complement to the theological doctrine of *The Cosmos*. Nevertheless, even in these works, the doctrine requires some teasing out, and this is best done with the aid of those sources on which De Koninck himself depended. I will use both Scripture and St. Thomas to expand De Koninck's doctrine since they were both authoritative for him. In this chapter, I discuss the first two concepts: gift-of-self, which we met for the first time in chapter four, and circularity. In the following chapter, I discuss mercy. I will show how De Koninck develops the role these concepts play in creation and the economy of salvation. In chapter seven I apply them to his doctrine of evolution. I argue that gift-of-self, circularity, and mercy are all increased in cosmic history by evolution.

1. Gift-of-Self in De Koninck

A contemporary reader might be surprised that, De Koninck uses the phrase "gift-of-self" (don de soi, don de soi-meme, se donner, and communication de soi) seven times in *The Cosmos*³

¹ Charles De Koninck, *Ego Sapientia: The Wisdom that is Mary in The Writings of Charles De Koninck*, vol. 2, trans. and ed. Ralph McInerny (Notre Dame, Indiana: University of Notre Dame Press, 2009). Henceforth, English translation referred to as *Ego Sapientia*.) *Ego Sapientia: La sagesse qui est Marie*, (Québec: Éditions de L'Université Laval, 1943). Henceforth, original French version referred to as *La Sagesse*.

² Charles De Koninck, *The Piety of the Son*, unpublished English translation by Ralph McInerny. Will be available on the Charles De Koninck Project website soon. <http://www.charlesdekoninck.com>. *La Piété du Fils; études sur l'Assomption*. Preface by Maurice Roy, Archbishop of Québec. (Québec: Presses Universitaires Laval, 1954).

³ *The Cosmos*, 302, 303, and 306. (*Le Cosmos*, 150,151, and 162).

long before John Paul II's work in the *Theology of the Body* gave it such prominence. However, the phrase or similar ones have long been in use in the Catholic tradition.⁴ Of writers contemporary with De Koninck, such phrases can be found in texts of Teilhard de Chardin (1881-1955), Jacques Maritain (1882-1973), Raissa Maritain (1883-1960), Gabriel Marcel (1889-1973), and Herbert Doms (1890-1977). Of these, De Koninck mentions, in other contexts, Teilhard de Chardin,⁵ Jacques Maritain,⁶ and Herbert Doms.⁷ It is certainly significant that gift-of-self is frequently mentioned in the spiritual and philosophical milieu of the time among authors we know that De Koninck read. De Koninck, however, principally cites passages from St. Thomas to explain communication or gift-of-self and to show its fundamental importance. Since De Koninck refers to St. Thomas for this and other theological topics over a hundred times in *The Cosmos* and much of the text is citations or paraphrases of St. Thomas, I will use St. Thomas as an aid in explaining De Koninck's thought, although when I do so I will focus particular attention on texts De Koninck himself mentions.

De Koninck understands gift-of-self or communication of self or fruitfulness and the circular motion it necessarily leads to as a first principle for understanding all of reality, both God and creation. In a letter to Mortimer Adler, De Koninck writes, "Now the essence of nature is *communication of itself*."⁸ In *The Cosmos*, he writes, "This *generosity* which a nature is."⁹ By nature in these sentences, he means everything that has a nature or essence, everything that exists.

⁴ Michael Waldstein has collected texts using "gift-of-self" or closely related phrases in the tradition. He has found texts of St Augustine (died 430), St. Bernard of Clairvaux (died 1153), St Thomas Aquinas (1223-1274), St. Bonaventure (died 1274), St. John of the Cross (1542-1591), and Louis de Montfort (died 1716). All of these authors are mentioned by De Koninck. Unpublished manuscript.

⁵ Note in which De Koninck mentions Teilhard de Chardin, Charles De Koninck Archive in the Jacques Maritain Center, University of Notre Dame, Folder 28: Part 5, 5.

⁶ Many references in De Koninck: Among others: De Koninck, *The Philosophy of Sir Arthur Eddington*; *Le Philosophie de Sir Arthur Eddington*; *In Defence of St. Thomas*; *Pour la defense de Saint Thomas*, 230.

⁷ Charles De Koninck, *The Principle of the New Order, The Writings of Charles De Koninck*, vol. 2, 156, fn. 60. *Le Principe de l'Ordre Nouveau, Œuvres de Charles De Koninck*, tome 2, 213,fn. 60.

⁸ *Letter to Mortimer Adler (Quebec, June 15, 1938)* Charles De Koninck Archive in the Jacques Maritain Center, University of Notre Dame, Folder 32: Part 6, 1.

⁹ *The Cosmos*, 303. "cette générosité qu'est une nature" (*Le Cosmos*, 96).

“Fruitfulness is a necessary property of *every being*”¹⁰ De Koninck writes in his brief piece, “Divine Fruitfulness.” Communication of self begins in the Trinity as De Koninck explains in the same piece.

It is in the generation of the Word and in the breathing-forth of the Holy Spirit that is manifest the absolute fruitfulness of God... We find a trace of this fruitfulness in all the degrees of being insofar as every created being necessarily contains a trace of the Holy Trinity. Consequently, fruitfulness is a necessary property of every being.¹¹

De Koninck considers fruitfulness in creatures a trace or footprint of the Trinitarian where *absolute fruitfulness* exists in the processions. Let us explore the relation between nature, fruitfulness, communication and gift in this thinker by examining several texts of De Koninck carefully. Let us first turn back to De Koninck’s letter to Adler.

It has become the custom with modern scholastics to consider freedom as the very essence of personality. They give as a reason that personality is something absolute. They place the accent on ‘*substantia individua*’. They neglect the “*rationalis naturae*”. *Natura* is the most profound element of the definition, the other elements merely serve to render it more *nature*. Now *the essence of nature is communication of itself*. (See splendid art. In Q. de Potentia, q. 2, a. 1). The more this communication is necessary the more perfect it is. That is the case in the Trinity. The divine processions are necessary and interior to one nature from which they are not distinct. There is no question of freedom in this most exalted form of personality, and there is communication of nature.

Freedom always implies some imperfection, either in the subject or in the object. God’s freedom regards finite being. The creature’s freedom relative to the most perfect object (God as known indirectly) implies imperfection in the creature.

The incommunicability of personality is a condition of communication. Paradoxically: the more a suppositum is incommunicable, the more it is a principle of communication.¹²

In this passage, De Koninck analyzes Boethius’s definition of the person cited in the *Summa Theologiae*. “A person is an individual substance of a rational nature.”¹³ De Koninck considers nature the most important part of the definition because nature is self-communication and the

¹⁰ “Divine Fruitfulness;” emphasis added. “La fécondité est par conséquent une propriété nécessaire de tout être” (“La Fécondité Divine,” Appendix 3).

¹¹ “Divine Fruitfulness.” “C’est dans la génération du verbe et la spiration du Saint Esprit que se manifeste la fécondité absolue de Dieu... Nous retrouvons un vestige de cette fécondité à tous les degrés de l’être dans la mesure où tout être créé contient nécessairement un vestige de la Sainte Trinité” (“La Fécondité Divine,” Appendix 3).

¹² Letter to Adler, 4.

¹³ *ST I 29.1 arg. 1*: “Persona est rationalis naturae individua substantia.” Boethius, *The Theological Tractates*, Loeb Classical Library (Cambridge, Massachusetts and London: Harvard University Press, 1978 [1918],) *Contra Eutychen et Nestorium*, III, 5, p.84.

more perfect a nature is, the more perfectly it can communicate itself. Therefore an individual of a rational nature has a more perfect nature than lower creatures because it can communicate itself more perfectly. Self-communication is not necessarily by free choice, he maintains; rather the most perfect communication is in the processions of the Trinity where self-communication is absolutely complete but not free. Freedom, in the sense of being able to choose between possibilities, implies indetermination, which is a lack of perfection or act. Freedom is for the sake of acquiring the good; where the supreme good is possessed perfectly, freedom with respect to that good could only mean being able to lose that good. Such freedom would be an imperfection.

The incommunicability of persons that De Koninck speaks of means that one person is not another person but each subsists or stands in itself. Each created person is its own center of consciousness and activity, an “I”; this is what opens a person to action or communication. A rock has no center of consciousness, no “I.” It is precisely because my “I” is not your “I” and can never become your “I,” that we can become friends or spouses; or teachers and students. It is persons that can actively and consciously communicate; it is persons that can know and love each other and everything true and good. The incommunicability of persons is for the sake of communication, both gift of self in friendship and fellowship in the common good and diffusion of it.¹⁴ De Koninck speaks of these two kinds of communication, gift and fellowship in sharing a common good, in a number of works. The first form of communication is what we most commonly think of as giving; namely, giving goods or acts of service or friendship; the first of such gifts is the love by which a person wills the good of the other and for that reason wills to give everything else.¹⁵ Another form of communication is what we might more commonly call fellowship or sharing in a common good. The communication, which can still be called a gift in this sense, is first of all from the common good which diffuses itself to all who participate in it.

¹⁴ “Man, who is the only creature on earth which God willed for itself cannot fully find itself except through a sincere gift of self.” (*Gaudium et spes* 24:3).

¹⁵ *ST* I 38.2: “Primum ergo quod damus ei, est amor quo volumus ei bonum. Unde manifestum est quod amor habet rationem primi doni, per quod omnia dona gratuita donantur.”

Those participating in it give or are fruitful by loving the common good more than themselves and by rejoicing in its fruitfulness. They serve the common good by actively diffusing it if they can; if they cannot, they produce a kind of fruit in their bond of love for the common good and for those who share in it with them. De Koninck names this form of communication spiritual fruitfulness. “This generating and impelling fruitfulness of nature tends basically to the fruitfulness of the spirit—thought and intellectual love—a fruitfulness so great that it remains interior to the subject.”¹⁶

In his works on the common good, De Koninck explains more about what communication in the common good involves. He describes the spiritual fruitfulness that will be perfected in heaven and in what ways one can speak meaningfully of a gift-of-self in this context.

So it is in beatitude. Both Peter and John know that it is better that He be present to both together... In seeing God, Peter sees what is greater than anything which could be his proper good for he knows that he is only Peter; he sees that God is infinitely more communicable than He is to Peter himself, and it is this infinity of goodness Peter loves, because he loves God in Himself and in that bounty which of its very nature is diffusive of itself... And if there be also John to share the vision, Peter cannot fail to rejoice, because the superabundance of the divine good is his joy. And if the share of John be greater than his own, Peter will again rejoice, for the prime measure of their happiness is neither Peter nor John, but the immeasurable liberality of the divine good... This union [between the Blessed] is the most profound, for it is not merely an effect of the termination of the vision and love of the Blessed in the same object and good, but is founded also in the fact that the object and the good are attained and adhered to in their very universality.¹⁷

First, God communicates Himself to the saints as the object of their vision. Second, the saints see, love, and rejoice in God. These activities forge a bond of communion with Him. Third, a bond arises between the saints because they both know and love the same common good, God, and

¹⁶ “Divine Fruitfulness.” “Cette fécondité génératrice et impulsive de la nature tend au fond vers la fécondité de l’esprit- la puisée et l’amour intellectuel- fécondité qui est si grande qu’elle reste intérieure au sujet” (“La Fécondité Divine,” Appendix 3).

¹⁷ *In Defense of St Thomas*, 314. “Il en est de même dans la Béatitude. Pierre et Jean savent qu’il est meilleur qu’il soit présent à tous deux à la fois... En voyant Dieu, Pierre voit ce qui est plus grand que tout ce que pourrait être son bien propre, parce qu’il voit qu’il n’est que Pierre; il voit que Dieu est infiniment plus communicable qu’à lui, Pierre, seulement, et c’est cette infinité dans la bonté que Pierre aime, parce qu’il aime Dieu en Lui-même et dans cette bonté qui par sa nature même est diffusive de soi... Et s’il y a là Jean, prenant part lui aussi à la vision, Pierre ne peut manquer de s’en réjouir car c’est la surabondance du bien divin qui fait sa joie. Et si la part de Jean est plus grande que la sienne, Pierre s’en réjouit encore, car ni Pierre ni Jean ne sont l’aune et la mesure de leur bonheur, mais l’incommensurable libéralité de la bonté divine... Cette union est la plus profonde car elle n’est pas simplement l’effet de ce que la vision et l’amour des Bienheureux s’achèvent dans le même objet et le même bien; elle repose aussi sur le fait que l’objet et le bien sont atteints et aimés dans leur universalité même” (*Pour la Défense du Saint Thomas*, 325-326).

love Him to be attained by all the other saints. De Koninck's use of the term *spiritual fruitfulness* can be justified because something real is born from the spiritual activities of the saints. The bond of love to God and the saints is something real as is the vision of God. In God, the bond of love is so real, it is a person, the Holy Spirit, arising from the love between the Father and the Word, as is the fruit of the Father's vision, the Word.

Although we cannot speak in the same way of the divine persons as centers of consciousness and activity, there is a real distinction or incommunicability among them. Jesus reveals that there is an "I" and "You" in his relationship to the Father in whatever mysterious way there can be distinct persons with one intellect and will. "That all may be one, as you, Father, are in me, and I in you, that they also may be in us, so that the world may believe that you have sent me" (Jn 17:21). The distinction of persons makes possible a union of affection in addition to the union of essence. "The glory which you have given me I have given to them, that they may be one even as we are one, I in them and you in me, that they may become perfectly one, so that the world may know that you have sent me and have loved them even as you have loved me" (Jn 17:22). The real distinction or incommunicability of the divine persons is the necessary foundation for the union of affection. The union of affection is fruitful; its fruit is the Holy Spirit. Let us look again at De Koninck's description of the procession of the Holy Spirit.

What proceeds in God according to love does not proceed as what is engendered, or as son, but rather as "spirit" where the "name" *spirit* reveals a vital movement and impulse; thus we say that a person is moved and pushed, lifted up, by love...What is proper to love is to push and to drag along the will of the one who loves towards the beloved object.¹⁸

The Holy Spirit proceeds as the fruit of the love of the Father and Son toward each other, made possible by their distinction.

¹⁸ "Impulse of the Holy Spirit." "ce qui procède en Dieu selon l'amour, ne procède pas comme engendré, ou comme fils, mais plutôt comme "esprit": or le "nom"- *esprit*- révèle une motion- et une impulsion vitales; ainsi nous disons qu'une personne est mue et poussée, soulevée, par amour.... Or le propre de l'amour est de pousser, et d'entraîner la volonté de celui qui aime vers l'objet aimé" ("L'Impulsion du Saint-Esprit," Appendix 2).

De Koninck speaks again about the connection between nature, person, and self-communication in a similar passage in *The Primacy of the Common Good against the Personalists*.

It is also important to remark that the person himself is defined universally by *communicability: rationalis naturae individua substantia*: an individual substance of a rational nature, where nature must be understood in the sense of principle of operation. The incommunicability of the person itself does not have the note of term, as if the person existed for his incommunicability, on the contrary, far from being ‘for itself’ in this incommunicability, this opens nature to communication—*actiones sunt suppositorum*. The divine persons are essentially expressive of the fruitfulness of the divine nature. In the case of the created person, communication is accomplished in the vital participation in the common goods.

The being-for-itself of every created person is for the sake of its participating in or communicating in its end, which is God.¹⁹ The incommunicability of the divine persons is the fruit of the communication of the divine nature in the processions.

In this passage De Koninck replies to an argument “that the dignity of the person is opposed to the notion of part and to this ordination to the common good.”²⁰ De Koninck says that the dignity of the person comes not from being an individual but from the rational (or intellectual) nature that the person has or is in the case of the divine person. The nature is what allows the person to act or communicate act. The Father generates the Son by the intellectual power of the divine nature. He speaks the Word in knowing Himself. “The most fundamental dogma of catholic theology is that of the Trinity,” says De Koninck in the same letter to Adler, mentioned above. “In the Trinity we find *generation* in its highest form: in the procession of the Son. The

¹⁹ Charles, De Koninck, *The Primacy of the Common Good, The Writings of Charles De Koninck* volume 2 (Notre Dame, Indiana: University of Notre Dame Press, 2008), 89-90. “Il importe, en outre, de remarquer que la personne elle-même se définit universellement par la communicabilité: ‘*rationalis naturae individua substantia* – substance individuelle d’une nature raisonnable’, où il faut entendre nature au sens de principe d’opération. L’incommunicabilité de la personne elle-même n’a pas raison de terme comme si la personne existait pour son incommunicabilité; au contraire, loin d’être un ‘pour soi’ dans cette incommunicabilité, celle-ci ouvre la nature à la communication – *actiones sunt suppositorum*. Les personnes divines sont essentiellement expressives de la fécondité de la nature divine. Dans le cas de la personne créée, la communication s’accomplit dans la participation vitale au bien commun.

L’être-pour-soi de toute personne créée est pour sa fin qui est Dieu” (*La Primauté du Bien Commun*, 134-135).

²⁰ *The Primacy of the Common Good*, 88. “que la dignité de la personne s’oppose à la raison de partie et à cette ordination au bien commun” (*La Primauté du Bien Commun*, 133).

divine processions are *communications* within the identity of divine nature.”²¹ Again De Koninck posits communication in the Trinity. The highest forms of communication are the divine processions. Humans know and love by the powers of human nature. Boethius’s definition of person includes *rational nature*, which means a nature that has the power to understand truth, but understanding always involves a communication or expression of truth. Therefore, the power of self-gift or communication is an essential feature of being a person.

De Koninck argues that the individuality and incommunicability or being-for-itself of persons does not mean that they should not be fruitful. God the Father Himself does not keep Himself for Himself, but exists always and only in fruitful relation to the Son and Holy Spirit to whom He gives His own being. “The divine persons are essentially expressive of the fruitfulness of the divine nature.”²² The highest fruitfulness or communication of created persons is in their participation in the common goods of truth, beauty and goodness, and most of all in their participation by knowledge and love in the highest common good, God. The “being-for-itself” of created persons does not mean that they are their own end, but it enables them to consciously order themselves to God as their end. “The being-for-itself of every created person is for the sake of its end which is God. Nothing is anterior to this indissoluble being for itself for God. The only thing that can dissolve it is evil.”²³

De Koninck moves in this passage from a consideration of communication as gift of being in the divine processions to communication as “vital participation in the common goods” among humans. How does one give oneself in participating in common goods? Most fundamentally, one gives oneself to the common good when one loves it more than oneself and orders oneself to it, as common, rather than using it for one’s private aggrandizement, as a scholar might keep his

²¹ Letter to Adler, 8.

²² *The Primacy of the Common Good*, 90. “Les personnes divines sont essentiellement expressives de la fécondité de la nature divine” (*La Primauté du Bien Commun*, 134-135).

²³ *The Primacy of the Common Good*, 90. “L’être-pour-soi de toute personne créée est pour sa fin qui est Dieu. Rien n’est antérieur à cet indissoluble être-pour-soi-pour-Dieu. Rien ne peut le dissoudre si ce n’est le mal” (*La Primauté du Bien Commun*, 135).

discoveries secret for a time in order to exploit them for his career. One gives oneself to truth or beauty by wishing to serve it both by striving to always know it better and to share it with others by teaching or writing or painting or sculpting.

When humans love God, they give themselves to Him in a spousal union and at the same time wish and work towards this union being shared by more persons (if they are on earth) or rejoice in God being shared by all the blessed (if they are in heaven). Because the saints love God for His goodness and its infinite communicability, they give themselves to Him in a love that rejoices in His goodness and in its being shared by all the Blessed. By the same act through which they unite themselves in love to God, they open themselves to companionship with everyone who shares in that love. The friendship or bond of charity with God and the other saints is an objective fruit of spiritual fruitfulness just as conjugal friendship is as much an objective fruit of marriage as are children.²⁴ De Koninck writes of the *true form* of conjugal love that should arise as a fruit of marriage even if there are no children in a letter about contraception.

A truly conjugal love can only arise between persons of different sex, so that they may be two in one flesh, a thing, which, of itself, is established by nature for the good of the child. And if sterility should make impossible the birth of children, conjugal love can still arise in its true form by reason of that fidelity between the married pair, which, absolutely speaking, is intended for the welfare of the child... Married love must be acknowledged as truly “liberal,” not as a servile relationship in which another person functions as a mere tool for propagation. How could we ever pretend that the union of marriage was a sacrament, image of the most sacred of all unions, if it were nothing better than this?²⁵

Conjugal love *arises* from the husband and wife as the Holy Spirit arises, is “lifted up, by love”²⁶ from the Father and Son. Conjugal love is not another person, but it is a *thing*, a *relationship*, established by nature; it is a *union* that is a sacrament or image of the sacred union between Christ and the Church. De Koninck considers spiritual fruitfulness true fruitfulness because it produces

²⁴ See Hans Urs von Balthasar on the bond of friendship as spiritual fruit in *Explorations in Theology, Volume 3: Creator Spiritus* (San Francisco: Ignatius Press, 1995), 204-209.

²⁵ De Koninck and Monsignor Maurice Dionne, *The Question of Infertility* (Memorandum, Quebec January 25, 1965) 10-11.

²⁶ “Impulse of the Holy Spirit.” “soulevée, par amour” (“L’Impulsion du Saint-Esprit,” Appendix 2).

real fruits: vision and friendship. These fruits are greater than physical offspring for “the fruitfulness of the spiritual life is the true end of the work of propagation.”²⁷

In the passage from *de Potentia*, to which De Koninck refers in the earlier passage from the letter to Adler, St. Thomas links communication of self to perfection.

It is the nature of every act that it *communicates itself* as much as possible. Therefore everything acts according as it is in act. For acting is nothing other than communicating that through which the agent is in act, as much as this is possible. Now, the divine nature is most of all and most purely act. Therefore it also *communicates itself* [*communicat se ipsam*] as much as possible. It *communicates itself* through mere likeness to creatures, which is clear to all, for any creature is a being in accord with likeness to it [that is to the divine nature]. But the Catholic faith also posits another way of *communication of itself*, inasmuch as it *communicates itself by a natural communication*, as it were, so that, just as the one to whom humanity is communicated is a human being, so the one to whom divinity is *communicated* is not only similar to God, but is truly God.²⁸

Act or perfection, St. Thomas says, is communication of act. Therefore the higher the nature, the more perfect a communication of self a being will be capable of. Communication is thus not something in addition to being perfect, but is an aspect of perfection itself. *Everything acts according as it is in act*. The fire heats other things because it is hot, by the same act. In creatures, since there is a path from potency to act; there is a difference between substantial and accidental being or between first and second act. Humans are born ignorant; they need to learn science and even when they have acquired science they are not always actually thinking about it. However, perfection or activity is always communication of act. When the wise man is actually thinking about his science there is a perfect correspondence between act and communication of act; knowing is expressing knowledge in a concept. The musician playing a sonata is in act insofar as he is communicating music (act). One should note that neither the wise man nor the musician need communicate to another person; there is already a communication to self in science or

²⁷ “Divine Fruitfulness.” “la fécondité de la vie spirituelle est la véritable fin de l’œuvre de propagation” (“La Fécondité Divine,” Appendix 3).

²⁸ *de Potentia*, 2.1: “Natura cuiuslibet actus est, quod seipsum communicet quantum possibile est. Unde unumquodque agens agit secundum quod in actu est. Agere vero nihil aliud est quam communicare illud per quod agens est actu, secundum quod est possibile. Natura autem divina maxime et purissime actus est. Unde et ipsa seipsam communicat quantum possibile est. Communicat autem se ipsam per solam similitudinem creaturis, quod omnibus patet; nam quaelibet creatura est ens secundum similitudinem ad ipsam. Sed fides Catholica etiam alium modum communicationis ipsius ponit, prout ipsamet communicatur communicatione quasi naturali: ut sicut ille cui communicatur humanitas, est homo, ita ille cui communicatur deitas, non solum sit Deo similis, sed vere sit Deus.”

making music. However, there is more communication if the wise man also teaches or the musician plays for an audience. Furthermore, there is or can be a bond of love or affirmation or gratitude towards the One who grounds all truth and beauty in contemplation or artistic making that is a further spiritual fruit.²⁹

In God, there is no difference between His being and His communication of being within the Trinity. The Father is Paternity. Act is perfectly identical with communication of act. The Father communicates Himself perfectly in begetting the Son and breathing forth the Spirit and the Son communicates Himself perfectly in breathing forth the Spirit with the Father. In creation, God communicates Himself imperfectly since no creature can become God. Still every creature is a likeness of God since every agent makes something like itself.

De Koninck also writes about the equivalence of communication and perfect goodness in his works on the common good. The common good must be loved for its communicability or it is not loved as the perfect good that it is. “To prescind from the superabundant and inexhaustible communicability of divine goodness to other persons amounts to prescinding from the infinite plenitude of divine goodness...It is impossible to love God as He is in Himself without loving Him in His communicability to others.”³⁰ In this passage, De Koninck correlates the plenitude of divine goodness with infinite communicability. What is perfect in goodness, gives itself perfectly (necessarily within the Trinity and freely to created persons), therefore if one loves the common good for its goodness, one must love its goodness to be communicated.

In my last chapter, I will argue both that God’s communication of goodness or gift-of-self to the cosmos and gift-of-self within the cosmos, from cosmic being to cosmic being, are increased in creation through evolution.

²⁹ See Josef Pieper, *Happiness and Contemplation* (New York: Pantheon Books, 1958), 81-88.

³⁰ *In Defence of Saint Thomas*, 262-263. “que faire abstraction de l’inépuisable et surabondante communicabilité de la bonté divine aux autres personnes revient à faire abstraction de l’infinie plénitude de la bonté divine... on ne peut aimer Dieu en Lui-même sans l’aimer dans Sa communicabilité aux autres” (*Pour la Défense de Saint Thomas*, 278-279).

2. Circularity

Communication always involves a circular motion; hence circularity is also a vital notion for De Koninck. In every communication, there must be a giver, a gift, and a recipient. If the recipient truly receives the gift, there must be some acknowledgement, thanks, or at least a new aspect to the recipient, which reflects back the gift to the giver. The husband gives his wife a necklace; she returns thanks with a kiss. The sun pours light on the moon; the moon reflects the light back to the sun. Communication is most perfect when the return to the origin of the gift and therefore the circular motion is most complete. An anonymous gift is unsatisfactory because one cannot thank the giver.

Circularity is a foundation for the order of the whole of reality, according to St. Thomas. Circular order is found first in the Trinitarian processions. Second it is found in the exitus-reditus structure of creation. Fr. Gilles Emery summarizes the circular order presented by St. Thomas in *The Sentences*, “This synthesis thus presents the Father as the one from whom all comes and to whom all returns, through the eternal procession and the temporal procession (the incarnation and mission) of the Son.”³¹

Seven years after writing *The Cosmos*, De Koninck wrote a book on Mary called *Ego Sapientia; the Wisdom that is Mary*. Circularity is one of the most important themes in *Ego Sapientia*. In her careful outline of the text, Katherine Gardner finds seventeen separate references to circularity in *Ego Sapientia*.³² De Koninck argues that Mary links up the circular order of the Trinity with the circular order in creation.

Daughter of the eternal Father, mother of the Son, spouse of the Holy Spirit, she is rooted in the order of the Trinity, and she links up the order of the universe in a radically new way to the order

³¹ Gilles, “Trinity and Creation: The Trinitarian Principle of the Creation in the Commentaries of Albert the Great, Bonaventure, and Thomas Aquinas on the *Sentences*,” *Trinity in Aquinas* (Ypsilanti, Michigan: Sapientia Press of Ave Maria College, 2003), 57. Hereafter abbreviated “Trinity and Creation.”

³² Katherine Gardner, “A Wheel within Wheels: Circularity and Procession in Charles de Koninck’s *Ego Sapientia*.” Privately circulated paper at Ave Maria University, 2012.

which is in God according to the processions.³³

I will begin at the beginning with the first circle, which is in the Trinity.

A. The First Circle: Divine Processions

The first communications are the divine processions since the divine processions are necessary and natural and what is natural is always prior to what is by free choice. As we saw, De Koninck compares the divine processions to the production of creatures in his letter to Adler.

The divine processions are necessary and interior to one nature from which they are not distinct. There is no question of freedom in this most exalted form of personality, and there is communication of nature.

Freedom always implies some imperfection, either in the subject or in the object. God's freedom regards finite being.³⁴

God communicates His being by nature and of necessity in the divine processions whereas He creates freely. By *freedom*, in this passage, De Koninck means *free choice* rather than a wider meaning of self-movement. For the Father is perfectly self-moved in begetting the Son; He is not forced to beget but pours out His substance to the Son most willingly. "The Father loves the Son and has given all things into His hands" (Jn 3:36).³⁵ Likewise the Father and Son move themselves most willingly as they breathe forth the Holy Spirit in the "procession of love."³⁶ Creatures are not perfect in goodness and so they are not worthy of drawing God's necessary love and communication.

The very first communication or gift-of-self is the Father's gift of the divine essence to the Son.³⁷ Communication *always* implies a circular motion: the giver communicates act; the

³³ *Ego Sapientia*, 15. "Fille du Père éternel, mère du Fils, épouse du Saint-Esprit, elle est enracinée dans l'ordre de la Trinité, et elle relie l'ordre de l'univers, d'une manière radicalement nouvelle, à cet ordre qui est en Dieu selon les processions" (*La Sagesse*, 50).

³⁴ Letter to Adler, 4.

³⁵ See also: Jn 17:24: "Father, I desire that they also, whom you have given me, may be with me where I am, to behold my glory which you have given me because you loved me before the foundation of the world."

³⁶ "The Impulse of the Holy Spirit." "la procession de l'amour" ("L'Impulsion de Saint-Esprit," Appendix 2).

³⁷ St. Thomas speaks of this gift in his *Commentary on the Sentences*: "To be given can belong both to the divine essence, as we say that the Father gives his essence to the Son and it can belong to the Father, so that the Father is said to give himself [as he does in the indwelling of the divine persons]; as likewise to the

recipient receives act, and the recipient reflects back the act to the giver. If fire makes the water hot; the hot water necessarily mirrors the heat of the fire. In the Trinitarian processions, there is no prior and posterior in time but there is a communication of the divine essence, therefore there is a circular motion in the divine processions.

De Koninck refers to the primacy of the circular motion between the Father and Son in *Ego Sapientia*.

This circular motion [between Mary as part of the cosmos and Mary as a separated principle] imitates in a way the circular motion between begotten Wisdom and the mother of this Wisdom, which in turn imitates more deeply still the circular motion between the Father and the perfect and consubstantial image of the Father, *as it were a wheel within a wheel—quasi sit rota in medio rotae*. (Ez 1:16).³⁸

De Koninck describes three circular movements. The first movement he mentions is the circular motion between Mary, in her role as a part of the cosmos, and Mary, in her role as a principle of the order of the cosmos.

Her position as a part is ordained to her position as a separate principle. She is born within to be a separated principle, she is born in the universe to become the mother of all things. That which is without proceeds from that which is within, and that which is within proceeds thence in order to proceed without... There is thus established a circular motion between her dignity as a separated principle and her dignity as the noblest part of pure creation, a circular motion which embraces the very order of the parts of the universe.³⁹

Mary is born as part of the cosmos, according to De Koninck, but becomes a separated principle of the order of the cosmos when she gives birth to divine Wisdom, who orders the whole, including herself, as a part. This motion imitates the circular movement between Christ, begotten Wisdom and creator, and Mary His mother, by whom He is generated in His human nature.

Son and to the Holy Spirit.” St. Thomas, *Super libros Sententiarum*, 1.15.3.1: “Unde dari, potest convenire et essentiae divinae, prout dicimus quod pater dat essentiam suam filio; et potest convenire patri, ut dicatur pater seipsum dare; et similiter filio, et spiritui sancto.”

³⁸ *Ego Sapientia*, 18. “Et cette circulation imite en quelque façon le mouvement circulaire entre la Sagesse engendrée et la mère de cette Sagesse, lequel imitait déjà plus profondément le mouvement circulaire entre le Père et l'Image parfaite et consubstantielle du Père: *quasi sit rota in medio rotae—comme une roue au centre d'une roue*” (*La Sagesse*, 58).

³⁹ *Ego Sapientia*, 17. “Son ‘être partie’ est ordonné à son ‘être principe séparé’. Elle est née au dedans pour être principe séparé, elle naît dans l'univers pour être mère de toutes choses. Ce qui est au dehors procède du dedans, et ce qui est au dedans y procède pour procéder du dehors. En tant que principe séparé de l'univers, elle est plus au dedans de l'univers qu'elle ne l'est comme partie principale de l'univers: du dehors elle est plus au dedans qu'elle ne l'est du dedans. *Intrinsecus ejus per circuitum*. Il s'établit ainsi un mouvement circulaire entre sa dignité de principe séparé et sa dignité de partie la plus noble de la pure création, circulation qui embrasse l'ordre même des parties de l'univers” (*La Sagesse*, 57-58).

She proceeds from Him who made her in order that He might proceed from her...The Son who is in the bosom of the Father, precontains all things, including the Virgin, and causes Himself to be contained in the womb of the Virgin...The Son and the mother thus constitute from the very beginning a kind of circular motion wherein the principle is the term, and the term, principle, a motion which is the symbol of Wisdom *which reaches from end to end* (Ws 8:1).⁴⁰

Mary comes out from the creator at her conception. Her creator-Son comes out from her at His birth and returns to her, at the Assumption. This return is described in another Marian book of De Koninck, *The Piety of the Son*, a collection of essays on the Assumption.

But the Son, exercising his piety in the Assumption, by that very fact effects a real return to the original of his human nature. Whereas in his procession from the Virgin, the Son is made dependent on his Mother, by the Assumption, Mary, with respect to her human nature, to her character as mother, to her complete substance, is in dependence on the child who in raising her effects a complete return to the person herself of his generating principle. In virtue of this return, the Virgin herself is there where the Son is. The real relations which unite the human nature of Christ to that of Mary are now truly present.⁴¹

The Son raises His mother and brings her home to Him in heaven at the Assumption. De Koninck argues that Christ's piety to His mother is the ground for raising her from the dead immediately so that He can return to her by bringing her home to Him in heaven at the Assumption.

This circular movement, in turn imitates *more deeply still* the circular motion between the Father and the perfect and consubstantial image of the Father." The circular motion between the Father and His image is the first circle and pattern for all circularity. It is the *wheel within a wheel*. De Koninck calls it a circular motion between the Father and His *perfect consubstantial image*. It is by considering the procession of the Son according to the analogy of the intellectual procession of Image or Word that De Koninck finds a circular motion.

⁴⁰ *Ego Sapientia*, 10. "Elle procède de Celui qui l'a faite pour que Lui-même procède d'elle... Le Fils qui dans le sein du Père précontient toutes choses, y compris la Vierge, se fait contenir dans le sein de la Vierge... Le Fils et la mère constituent ainsi, au principe, comme un mouvement circulaire où le principe est terme et le terme, principe; mouvement qui est le symbole de la Sagesse qui *Atteint d'un bout à l'autre-Attingit a fine usque ad finem*" (*La Sagesse*, 36-37).

⁴¹ *The Piety of the Son*, 46-47. "Mais le Fils, exerçant sa piété dans l'Assomption, effectue par la même un retour réel à l'original de sa nature humaine. Alors que dans sa procession de la Vierge, le Fils se met dans la dépendance d'une mère, par contre, avec l'Assomption, Marie, quant à sa nature humaine, quant à son caractère de mère, quant à sa substance complète, est dans la dépendance de son enfant qui en la ressuscitant opère un retour complet à la personne elle-même de son principe géniteur. Et en vertu de ce retour, la Vierge elle-même est là ou est son Fils. Les relations réelles qui unissent la nature humaine du Christ à celle de Marie sont maintenues dans leur vérité présente" (*La Piété du Fils; études sur l'Assomption*. Preface by Maurice Roy, Archbishop of Québec. [Québec: Presses Universitaires Laval, 1954], 34).

In *The Piety of the Son*, De Koninck uses the same phrase “consubstantial image” in the title of a chapter on the circular movement of Christ coming forth as image from Mary and returning to her. The title is: “In the Assumption Christ Makes a Complete Return to the Original of what He is in His Human Nature, the *Consubstantial Image*.”⁴²

In the chapter, De Koninck describes the circular movement in the birth and maturation of any organism.

In purely natural things, birth is the procession of a living thing in a nature of the same species but numerically distinct from its source, which comes little by little to maturity and independence. This can make us think that birth consists essentially in detachment, separation from its principle. But that would be to ignore that birth is also and no less essentially to proceed to resemblance of one’s principle, an *image* which expresses the nature of its original. But the image is of itself relative: the image of something. It is under this respect that the engendered and engenderer remain united, with a union that becomes more intimate, more perfect, to the degree that the child progresses and thus represents in a more adequate manner the original in the maturity of its nature.⁴³

According to De Koninck, natural generation is not complete at birth; it is only complete when the generated organism has matured to the perfection of an adult like its parent. The child remains in relation to its parent as long as both are alive and becomes more united to its parent the more closely it grows to resemble it. Maturity means that it can perform the same acts as its parents such as generation.

Although divine generation is a communication of being without any separation or maturing nonetheless one can speak of a return of the Image to its original because the consubstantial Image perfectly represents the Father who generates Him and is perfectly united to Him.

The generation of the Word is thus linked to the *plenitude* of the divine nature which is *communicated to itself* in expressing it in the Word’s identity. It is the very *perfection* of

⁴²*The Piety of the Son*, 45. “Dans l’assomption, le Christ fait un retour complet à l’original don’t il st, dans sa nature humaine, l’image consubstantielle” (*La Piété du Fils*, 33).

⁴³ *Piety of the Son*, 50; emphasis added. “La naissance, dans les choses purement naturelles, est la procession d’un vivant dans une nature de même espèce mais numériquement distincte de celle de son principe, et qui parvient peu à peu à la maturité et à l’indépendance. Cela pourrait donner à penser que naître consiste essentiellement à se détacher, à se séparer de son principe. Mais on oublierait alors que naître c’est aussi et non moins essentiellement procéder à la ressemblance de son principe, en image qui exprime la nature de son original. Or l’image est de soi chose relative: elle est image de quelque chose. Et c’est sous ce rapport que géniture et géniteur restent unis, d’une union qui dévient plus intime, plus parfait, à mesure que l’enfant progresse et qu’il représente ainsi d’une manière plus adéquate l’original dans la maturité de sa nature” (*La Piété du Fils*, 33-34).

knowledge to be revelatory and expressive of the thing known; this *fruitfulness* is essential to intellectual nature. The opposition between the Person of the Father and the Person of the Son is thus born from the *fruitfulness* of the divine nature. And this perfect distinction of Persons is only possible in a perfect numerical identity of nature. Knowledge, in effect, has the property of *drawing to itself the object known*: it is thus a procession toward the inner: procession ad intra. Consequently, the more *perfect* the knowledge is, the more the knower is united with the known. Since in God knowledge is absolutely *perfect*, the divine Word must be absolutely one with the principle from which He proceeds and without diversity of nature.⁴⁴

There is true fruitfulness and communication of self in God; the Father generates a Son of the same nature by the living operation of knowing. He expresses Himself in His Word. There is always circular motion in the intellectual operations, but in God there is perfect circularity because the knowledge begins within, from the Father's knowledge of Himself and there is perfect return of expressed knowledge to knower. The expressed knowledge, the Word, is one substance with the knower, distinct only by relative opposition.

Essential unity is emphasized in this passage more than personal distinction. In particular, the phrase in the first sentence "the plenitude of the divine nature which is communicated to itself," does not lend itself to an interpersonal analogy. Yet De Koninck does refer to the *perfect distinction or opposition between the Person of the Father and the Person of the Son* as welling up from divine fruitfulness. The perfect expression of knowledge can be understood in a personal way; the Father communicates all that He is to the Son; He keeps nothing back for Himself alone. De Koninck uses the phrase "Knowledge, in effect, has the property of *drawing to itself the object known*," which, while referring to the psychological analogy, nevertheless, also calls to mind a line from John. "The only-begotten Son who is in the *bosom* of the Father, he has made him known" (Jn 1:18). The Son can make the Father known because he dwells in the bosom of the

⁴⁴ *The Cosmos*, 332-333. "La génération du Verbe se rattache ainsi à la plénitude de la nature divine qui se communique à elle-même en s'exprimant dans son identité. Il est de la perfection même de la connaissance d'être manifestative et expressive de la chose connue: cette fécondité est essentielle à la nature intellectuelle. L'opposition entre la Personne du Père et la Personne du Fils naît ainsi de la fécondité de la nature divine. Et cette parfaite distinction des Personnes n'est possible que dans une parfaite identité numérique de nature. La connaissance, en effet, a comme propriété de tirer à soi l'objet connu: elle est par là une procession vers le dedans: processio ad intra. Et par conséquent, plus la connaissance est parfaite, plus le connaissant est uni au connu. Puisqu'en Dieu la connaissance est absolument parfaite, il faut que le Verbe divin soit absolument un avec le principe dont il procède et sans diversité de nature" (*Le Cosmos*, 129).

Father as the perfect expression of the Father's knowledge while the Father eternally embraces the Son or *draws Him* to His bosom. As De Koninck formulates it, "The divine Word is enclosed in His procession from the Father."⁴⁵ De Koninck further says that the Son is *revelatory* of the Father; he reflects the Father. We should not understand this reflection to be impassive or indifferent, like that of a dead mirror; it is, in more personal terms, grateful reception by the Son and offering back to the Father everything He has received, with eternal love. The fruitful mutual embrace of the Father and Son brings forth the Holy Spirit.

The procession of the Spirit follows the Son's in order of origin although not in time, since the Son proceeds from the Father alone while the Holy Spirit proceeds from both the Father and Son. "There are in God two distinct processions, that of the Word who proceeds from the Father, and that of Love which proceeds from the Father and from the Word conceived."⁴⁶ The completion of the circular motion of the procession of the Son is in the Holy Spirit, the bond of love between the Father and Son. We have already looked at a passage in *The Cosmos* in which De Koninck cites a line from *de Potentia* that compares the circularity in the divine intellectual operations to those in human intellectual operations. "As in God, so in the rational creature there is a certain circular motion in the operations of intellect and will."⁴⁷ Later in the same article, St. Thomas quotes St. Augustine on the circularity in the procession of the Holy Spirit:

According to Augustine (*de Trinitate* VIII), three things are required for love, the lover, the beloved and love itself. Now the two who love each other are the Father and the Son: and the love that is their mutual bond is the Holy Spirit. Therefore there are three persons in God.⁴⁸

⁴⁵ *The Cosmos*, 332. "Aussi le Verbe divin renferme-t-il dans sa procession à partir du Père" (*Le Cosmos*, 129).

⁴⁶ *The Cosmos*, 324. "Or, nous savons qu'il y a en Dieu deux processions distinctes, celle du Verbe qui procède du Père, et celle, de l'Amour qui procède du Père et du Verbe conçu." (*Le Cosmos*, 121).

⁴⁷ *de Potentia*; 9.9: "Est ergo tam in nobis quam in Deo circulatio quaedam in operibus intellectus et voluntatis; nam voluntas redit in id a quo fuit principium intelligendi: sed in nobis concluditur circulus ad id quod est extra, dum bonum exterius movet intellectum nostrum, et intellectus movet voluntatem, et voluntas tendit per appetitum et amorem in exterius bonum; sed in Deo iste circulus clauditur in se ipso. Nam Deus intelligendo se, concipit verbum suum, quod est etiam ratio omnium intellectuum per ipsum, propter hoc quod omnia intelligit intelligendo seipsum: et ex hoc verbo procedit in amorem omnium et sui ipsius."

⁴⁸ *de Potentia*, 9.9 s.c. 4: "Ad amorem tria requiruntur, scilicet amans, id quod amatur, et ipse amor, ut Augustinus dicit in VIII *De Trinitate*. Duo autem mutuo se amantes, sunt pater et filius; amor autem qui est

The Father and Son love each other in the Holy Spirit. Nothing proceeds outside the essence or is accidental to the essence; there is only the divine essence possessed according to three distinct modes. The Father loves the Son and the Son loves the Father in return and their mutual love brings forth the Holy Spirit, who is the bond between them.

In the next question in *de Potentia*, St. Thomas writes again about the circle of love in the Trinity.

The Holy Spirit both proceeds from the Father into the Son, and the Son into the Father, not indeed as into a recipient, but as the object of love. For the Holy Spirit is said to proceed from the Father into the Son, inasmuch as he is the love by which the Father loves the Son; and for a like reason it can be said that the Holy Spirit [proceeds] from the Son into the Father, inasmuch as he is the love by which the Son loves the Father; it can be understood that he proceeds from the Father into the Son, inasmuch as the Son receives from the Father the power of spirating the Holy Spirit; but it cannot be said thus that He proceeds from the Son into the Father since the Father receives nothing from the Son.⁴⁹

The Father and Son are united in the bond or pledge of their love, who is the Holy Spirit. This bond is not something separate but is the very dwelling within of each in the other as the lover dwells in his beloved by his love. “I am in the Father and the Father is in me” (Jn 14:11). The procession of the Holy Spirit is the circular movement of Father and Son toward each other, completed in each other in the person of the Holy Spirit.

The circular motions in God are the eternal communications or pouring out of the divine fruitfulness; they are the life of God. It is an intellectual life of knowing and loving; it is a life of personal communion because the knowing and loving is among persons. The communion of love is the unity of the circular order of the Trinity; it is a result of the self-gift of the processions. This life is perfect blessedness; nothing is lacking; nothing more is required.

eorum nexus est spiritus sanctus. Sunt ergo tres personae in divinis.” Augustine, *de Trinitate* VIII 5.4 and more exactly IX 1.2.

⁴⁹ *de Potentia*, 10.4 ad 10: “Spiritus sanctus et a patre procedit in filium, et a filio in patrem, non quidem sicut in recipientem, sed sicut in obiectum amoris. Dicitur enim spiritus sanctus a patre in filium procedere, in quantum est amor quo pater amat filium; et simili ratione potest dici quod spiritus sanctus est a filio in patrem, in quantum est amor quo filius patrem amat; potest autem intelligi quod procedat a patre in filium, in quantum filius a patre accipit virtutem spiritum sanctum spirandi; sed sic non potest dici quod procedat a filio in patrem, cum a filio nihil accipiat pater.”

B. The Second Circle: Creation as Exitus

Why then does God create? According to De Koninck, “Creation is essentially a *communication*. His work must be capable of appreciating the gratuitous *gift* that *communication* is.”⁵⁰ God creates in order to give Himself to creatures. His final end in creation is His own goodness which moves Him to create creatures with which He can share His goodness.

God is the end of all creatures. He did not create in order to manifest his glory unto Himself. He has no need of this. This manifestation calls for an appreciation by the creature itself. Now this can only be realized by a creature capable of knowing God. The intelligent creature alone is capable of an explicit return to its creative principle; so that a being which is not endowed with intelligence, cannot exist for its own sake; whereby it automatically becomes a function of another being, capable of knowing God.⁵¹

God gives to creatures so that they can receive and enjoy His goodness, but only intelligent creatures can enjoy the gift, therefore only intelligent creatures are willed by God for their own sake. They are the only creatures that can completely receive the gift of being since they are the only ones who can consciously possess their being or understand it as a gift from God. Sub-rational creatures are created to serve them.

However, God does not love creatures as an end as though they could move His will. Creatures add nothing to God’s goodness. But because God loves His goodness, He loves it in its communicability. De Koninck emphasizes the equivalence of loving God and loving his communication to others very strikingly, “Why is God so insistent that we love our neighbor? Why does our very salvation depend upon the love of our neighbor? ... It can surely be only because *it is impossible to love God as He is in Himself without loving Him in His communicability to others.*”⁵² It is the nature of goodness to be diffusive of itself, therefore to love the good, as *good*, means not only to love it to exist, and to be preserved in its existence, but also to will it to be diffused as much as possible. God creates because He loves His own goodness

⁵⁰ *The Cosmos*, 295. “La création est essentiellement une communication. Il faut que son oeuvre soit capable d’apprécier le don gratuit qu’est cette communication” (*Le Cosmos*, 86).

⁵¹ De Koninck, *The Problem of Evolution and Philosophy*; Charles De Koninck Archive, Folder 20:5, p.3. Original in English.

⁵² *In Defense of Saint Thomas*, 263. “Pourquoi Dieu tient-il tant à ce que nous aimions notre prochain?... Il se peut certainement que ce soit pour la simple raison qu’on ne peut aimer Dieu en Lui-même sans l’aimer dans Sa communicabilité aux autres” (*Pour la Défense de Saint Thomas*, 279).

and loves it in its diffusiveness, therefore He wills to communicate a share of His goodness to creatures so that they might enjoy it in what measure they can.⁵³

Why does God create many intelligent creatures instead of only one? De Koninck answers that it is because of God's desire to give Himself more abundantly.

Why did God in His goodness and wisdom produce a manifold of intellects? The only acceptable reason is that He wished to *communicate Himself abundantly*, and that the *communication of Himself* to a single created intellect could not meet the greatness of His design. He has not chosen to *manifest Himself* merely to this person, but to many persons. In this respect it is the *manifestation of Himself* to the *manifold* which is His primary intention.⁵⁴

God's goodness is also the cause of creatures as an efficient cause since every efficient cause makes something good like itself, but His goodness is more profoundly the cause of creation as a final cause since God would not become an agent or creator at all if He were not drawn or moved by His goodness as an end that could be perfective of others.⁵⁵

One can still wonder why God's goodness overflows outside Himself in the production or procession of creatures since there is already a perfect communication of goodness within the Trinity. God's communication of Himself in creation is essentially liberal; He needs nothing from creatures; they can add nothing to His perfect goodness. "Why does God [being] perfect create? Not having any need of the creature? A liberal man can comprehend it. He wants to communicate without having any need of profit."⁵⁶ Liberality is something greater than self-interest; it is fitting

⁵³ ST I 19.2.

⁵⁴ *In Defense of Saint Thomas*, 312. "pourquoi Dieu dans Sa bonté et Sa sagesse a-t-il produit une multitude d'intellects ? La seule raison acceptable est qu'Il a voulu Se communiquer abondamment, et que la communication de Lui-même à un seul intellect créé ne pouvait suffire à la grandeur de Son dessein. Il n'a pas choisi de se manifester seulement à telle personne, mais à un grand nombre. En ce sens c'est la manifestation de Lui-même à la multitude qui constitue Son intention principale" (*Pour la Défense de Saint Thomas*, 323).

⁵⁵ *de Veritate* 21, 1, ad 4: "Cum autem dicitur quod bonum sit diffusivum secundum sui rationem, non est intelligenda diffusio secundum quod importat operationem causae efficientis, sed secundum quod importat habitudinem causae finalis; et talis diffusio non est mediante aliqua virtute superaddita. Dicit autem bonum diffusionem causae finalis, et non causae agentis: tum quia efficiens, in quantum huiusmodi, non est rei mensura et perfectio, sed magis initium; tum etiam quia effectus participat causam efficientem secundum assimilationem formae tantum, sed finem consequitur res secundum totum esse suum, et in hoc consistebat ratio boni."

⁵⁶ *The Cosmos*, 303.

⁵⁶ "Course Notes on Nietzsche." "Pourquoi Dieu, parfait, crée-t-il ? N'ayant aucun besoin de la créature ? L'homme libéral peut le comprendre. Il veut se communiquer sans qu'il a ... du profit." (*Course sur Nietzsche*, Lecture 4, p.19). See also ST I 21.3.

for the Supreme Being, than which nothing greater can exist. But even more than from God's liberality, creation comes from God's mercy. We will look at mercy in depth in Chapter Six. There we will see that mercy connects the diffusion of goodness within the Trinity to the diffusion of goodness outside in creation.

De Koninck gives a further explanation of the processions when he quotes St. Thomas from Question 45 in the *Prima Pars*. "The processions of the divine Persons are the *reasons* [rationes] for the productions of creatures, insofar as these processions include the essential attributes which are knowledge and will."⁵⁷ How can we understand these reasons? In the first objection to the same question St. Thomas says:

What is prior is the cause of what comes after; and the perfect is the cause of the imperfect. But the procession of the divine persons is prior and more perfect than the procession of creatures, because the divine person proceeds in perfect likeness of its principle, but the creature proceeds in an imperfect likeness. Therefore the processions of the divine persons are the cause of the processions of things.⁵⁸

St. Thomas refers to a metaphysical principle from Aristotle, "What is prior must be the cause of the later terms."⁵⁹ Aristotle adds, "For if we had to say which of the three [first, intermediate, or last] is the cause, we should say the first; surely not the last, for the final term is the cause of none; nor even the intermediate, for it is the cause of only one....So that if there is no first there is no cause at all."⁶⁰ This principle holds in formal and final as well as efficient causality. This is certainly true in efficient causes: if there were no Michelangelo, the chisel would not move and there would be no statue. Since Michelangelo causes the chisel to be a cause, he is more responsible for the effect than the chisel. It also holds true of exemplar causality. If there were no George Washington, there would be no portrait of him by Gilbert Stuart; if there were no portrait,

⁵⁷ *The Cosmos*, 325; citing *ST* I 45.6: "Et secundum hoc processiones personarum sunt rationes productionis creaturarum, in quantum includunt essentialia attributa, quae sunt scientia et voluntas" (*Le Cosmos*, 121).

⁵⁸ *ST* I 45.6 arg.1: "Quod enim est prius, est causa eius quod est post; et perfectum imperfecti. Sed processio divinae personae est prior quam processio creaturae, et magis perfecta, quia divina persona procedit in perfecta similitudine sui principii, creatura vero in imperfecta. Ergo processiones divinarum personarum sunt causa processionis rerum." This discussion owes a great deal to Fr. Gilles Emery's arguments in "Trinity and Creation," 33-70.

⁵⁹ Aristotle, *Metaphysics* II.2 (994a12).

⁶⁰ Aristotle, *Metaphysics* II.2 (994a12).

there would be no postage stamps or book covers etc. with copies of the portrait on them. St. Thomas uses variations of this proposition numerous times. In the fourth way, St. Thomas refers explicitly to the same place in the *Metaphysics*, “Whatever is greatest in some genus is the cause of all things which are of that genus, as fire which is the hottest, is the cause of all hot things, as it is said in the same book [II *Metaphysics*].”⁶¹

Since the divine processions are the first and most perfect processions, the first flowing out of the divine goodness, they are the cause of all the other occasions of flowing out of divine goodness in the production of creatures. De Koninck speaks of the procession of creatures arising from the divine processions in *The Principle of the New Order* in a text that indicates De Koninck’s doctrine of evolution. He points out the personal causality of the Son:

The attempt to see the entire cosmos as a great flow, as an immense torrent arising always from a unique logos, from a first reason where natures are like whirls in the flux, is very laudable, even essential to a sapiential view, provided that one takes into account the limits and conditions of this method.”⁶²

The creatures flow out from the Logos who flows out from the Father. The natures of creatures are divine words or logoi derived from the Logos.

What kind of causality, according to De Koninck, do the divine persons exercise in the production of creatures? De Koninck answers this by paraphrasing the whole body of article 6 from Question 45 with the addition of a few phrases of his own and by citing the objections and part of article 7. Efficient and exemplar causality both seem to be involved. De Koninck leaves much to be deduced from the little he says.

The Cosmos

God is the cause of the creature by his intellect, which conceives it, and by His will by means of which He puts the

Summa theologiae

God is the cause of things through his intellect and will, as the craftsman of

⁶¹ *ST I 2.3*: “Quod autem dicitur maxime tale in aliquo genere, est causa omnium quae sunt illius generis, sicut ignis, qui est maxime calidus, est causa omnium calidorum, ut in eodem libro dicitur.”

⁶² *The Principle of the New Order*, 144. “la tentative de voir le cosmos tout entier comme une grande coulée, comme un immense torrent débordant continûment d’un logos unique, d’une raison première, et où les natures sont comme des tourbillons du flux, est très louable, voire essentielle à une vue sapientiale, pourvu qu’on se rende compte des limites de cette méthode et de ses conditions” (*Le Principe de L’Ordre Nouveau*, 198).

creature into existence. Thus we can compare Him to the artist who conceives a work and who exteriorizes this conceived work by means of his will

The artist works with a mental word that he conceives—for example, the conception of a tableau or a musical poem—and then he effects it outside himself by love of existence which is a good, thus giving a being proper to what he has conceived.

His work as an intelligible construction is a work of intellect; as realized in a concrete fashion, this work is a good which proceeds from the will's love. But we know that there are in God two distinct processions, that of the Word who proceeds from the Father, and that of Love which proceeds from the Father and from the Word conceived. The procession of the Word is appropriated to the operation of intellect, and the procession of the Holy Spirit is appropriated to the operation of will.

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Therefore, like an artist, God the Father has realized the creature by His Word, who is the Son, and by His Love, which is the Holy Spirit.

According to that, the processions of the divine Persons are the reasons for the productions of creatures, insofar as these processions include the essential attributes, which are knowledge and will.⁶³

artificial things.

The craftsman produces through the word conceived in his intellect and through the love of his will toward the related object.

So also God the Father produces the creature through his Word, which is the Son; and through his Love, which is the Holy Spirit.

And according to this the processions of the persons are the reasons [rationes] of the productions of creatures, inasmuch as they include the essential attributes, which are knowledge and love.⁶⁴

⁶³ *The Cosmos*, 324-325. "Dieu est cause de la créature par son intelligence qui la conçoit et par sa volonté au moyen de laquelle il pose la créature dans l'existence. Et ainsi nous pouvons le comparer à l'artiste qui conçoit une œuvre, et qui extériorise cette œuvre conçue, au moyen de sa volonté. L'artiste

(1) Divine Persons as Exemplar Causes

There is clearly exemplar causality involved. The artist works with a conception or archetype within his mind according to which he produces the artifact outside. In the same way, the Father produces creatures outside that are like the archetypes, which He has spoken in the Word. De Koninck writes in the following text of a “representation of all that God can do” in the Son.

The eternal Father, first Person of the blessed Trinity, engenders his consubstantial image, the Word of God, the Son, the second Person of the Trinity. And this Son proceeds, he is born eternally from the Father according to a purely intellectual procession, entirely spiritual. And in this birth of the Son in God proceeds at the same time the representation of all that God can do and all that He has done.⁶⁵

According to De Koninck, the Father, in begetting the Son, speaks the representation of all that He can or will do in creation. In a similar text, St. Thomas calls the representation in the Son “the productive archetype [ratio factiva] of what God makes.”

As God’s knowledge is speculative only of God, but speculative and productive of creatures; so the Word of God is expressive only of that which is in God the Father, but of creatures it is both expressive and productive. And for this reason it is said in Psalm 32: “He spoke, and they were made” (Ps 32:9); because in the Word is implied the *productive archetype* [ratio factiva] of what God makes.⁶⁶

opère par le verbe mental qu’il conçoit, par exemple la conception d’un tableau ou d’un poème musical, et il pose ensuite cette conception en dehors de lui par amour de l’existence qui est un bien, donnant ainsi un être propre à ce qu’il conçut. Son œuvre en tant que construction intelligible est une œuvre d’intelligence; en tant que réalisée de façon concrète, cette œuvre est un bien qui procède de l’amour de la volonté. Or, nous savons qu’il y a en Dieu deux processions distinctes, celle du Verbe qui procède du Père, et celle, de l’Amour qui procède du Père et du Verbe conçu. La procession du Verbe est appropriée à l’opération de l’intelligence, et la procession du Saint Esprit est appropriée à l’opération de la volonté. Donc, ainsi qu’un artiste, Dieu le Père a réalisé la créature par son Verbe, qui est le Fils, et par son Amour, qui est le Saint Esprit. D’après cela, les processions des Personnes divines sont les raisons de la production des créatures, pour autant que ces processions incluent les attributs, essentiels qui sont la science et le vouloir” (*Le Cosmos*, 120-121). De Koninck is partly paraphrasing *ST I* 45.6. See next note.

⁶⁴ *ST I* 45.6: “Deus est causa rerum per suum intellectum et voluntatem, sicut artifex rerum artificiarum. Artifex autem per verbum in intellectu conceptum, et per amorem suae voluntatis ad aliquid relatum, operatur. Unde et Deus pater operatus est creaturam per suum verbum, quod est filius; et per suum amorem, qui est spiritus sanctus. Et secundum hoc processiones personarum sunt rationes productionis creaturarum, inquantum includunt essentialia attributa, quae sunt scientia et voluntas.”

⁶⁵ *Piety of the Son*, 35. “Le Père éternel, première Personne de la très sainte Trinité, engendre son Image consubstantielle, le Verbe de Dieu, le Fils, la deuxième Personne de la Trinité. Et ce Fils provident, il naît éternellement du Père selon une procession purement intellectuelle, entièrement spirituelle. Et dans cette naissance du Fils en Dieu procède en même temps la représentation de tout ce que Dieu peut faire et de tout ce qu’Il fait” (*La Piété du Fils*, 25).

⁶⁶ *ST I* 34.3: “Et sicut Dei scientia Dei quidem est cognoscitiva tantum, creaturarum autem cognoscitiva et factiva; ita verbum Dei eius quod in Deo patre est, est expressivum tantum, creaturarum vero est expressivum et operativum. Et propter hoc dicitur in Psalmo 32, dixit, et facta sunt; quia in verbo importatur ratio factiva eorum quae Deus facit.”

Thomas says that the Word contains the productive archetypes of creatures, because He not only expresses what they are, but produces them in being. De Koninck also writes about the formal causality of the Word in a critique of Marxism in the *Principle of the New Order*.

Saint Thomas defines nature as “a reason (*ratio*, *logos*) put in things by divine art in order that they might act for an end” (Physics II, lectio 14). In effect, action for an end presupposes intelligence, or at least a participation in intelligence. Nature properly speaking is a substitute for intelligence...The most unreasonable nature is always a divine logos. Even the purely material principle, the passive principle of all things, being as well properly nature, is as it were a divine word.⁶⁷

Every nature is a participation in the divine Word, derived from the Word. Animal instinct, plant tropisms, and even chemical bonds are all participations in reason so that each cosmic creature acts in a determinate way for an end. According to De Koninck, the Marxists wish to conquer nature and change “the world of natures” into “operable matter.” They are at war with “all that which tends to take on the stability of a nature, all that which perfects or fulfills it in the line of nature...” They wish to destroy “not only the completely natural society that is the family, but even political society whose roots are natural, have to be exterminated. *The Word must be sought in every word that He has made*, to the most remote limits of creation.”⁶⁸

The Marxist war against nature is a war against the Word who made natures. The Marxists want to be able to make whatever they choose out of anything. Therefore they need to first unmake everything. They need to destroy the plan or meaning of everything so that its determinate nature and end will not prevent it from being used for whatever the new man, the product of the revolution, desires to use it for. The family and society must be *exterminated* so

⁶⁷ *The Principle of a New Order*, 143. “Saint Thomas définit la nature: ‘une raison (*ratio*, *logos*) mise dans les choses par l’art divin, afin qu’elles puissent agir pour une fin’. (ibid. lect. 14 ; aussi, XII Métaph., lect. 12). En effet, l’action pour une fin suppose intelligence, ou du moins une participation d’intelligence. La nature proprement dite est donc un substitut d’intelligence... la nature la plus irraisonnable est toujours un logos divin. Même le principe purement matériel, le principe passif des choses naturelles, étant lui aussi proprement nature, est comme un verbe divin” (*Le Principe de L’Ordre Nouveau*, 197).

⁶⁸ *The Principle of a New Order*, 146. “Devant cette intelligence en révolte, le monde des natures doit être converti en matière opérable, et la résistance des natures doit servir de levier à une action tournée contre elles. Et tout ce qui tendrait à revêtir la stabilité d’une nature, tout ce qui viendrait la parfaire ou s’achever dans la ligne de la nature devient aussi une contrainte à notre liberté, un obstacle à abattre ; donc, non seulement la société toute naturelle qu’est la famille, mais même la société politique dont les racines sont naturelles, doivent être exterminées. Il faut poursuivre le Verbe dans toute parole qu’Il a faite, jusqu’aux confins les plus reculés de la création” (*Le Principe de L’Ordre Nouveau*, 201).

that man may choose any sort of union or no union at all for himself. But the divine Word is to be found in every cosmic nature as its archetype; the Marxist war against natures is a war against the Word.

The procession of the Holy Spirit is also an archetype, in an analogous sense, for the production of creatures, not because the Spirit contains the formal plans according to which they are produced, but because He is the archetypal love by which the Father [and Son] love creatures and will them into existence.

As the Father speaks himself and every creature in the Word which he begets, inasmuch as the begotten Word sufficiently represents the Father and every creature; so He loves himself and every creature by the Holy Spirit, inasmuch as the Holy Spirit proceeds as love of the first goodness according to which the Father loves himself and every creature. And thus it is evident that a relation to the creature is implied both in the Word and in proceeding Love, in a secondary way; inasmuch as divine truth and goodness are the principle of knowing [the archetypes] and loving [willing into existence and motion] every creature.⁶⁹

Because the Father loves Himself (and the Son) by the Holy Spirit, He also loves creatures and wills them into existence by the Holy Spirit. For the Father does not have two acts of will. He loves the divine goodness in Himself, the Son and the Holy Spirit by the same act of will by which He wills it to be diffused to creatures.⁷⁰ Therefore the name for the Holy Spirit, “Proceeding Love,” implies the relationship of creatures to God just as the name for the Son, “Word,” does. Both names refer not only to the divine person’s origin as Word, spoken by the Father, or as Love, proceeding from the Father and the Son, but also to the relationship of creatures to them. Creatures are related both to the Word, who represents them, and to Proceeding Love, who wills them into existence and directs them toward their end.

⁶⁹ *ST I* 37.2 ad 3: “Pater non solum filium, sed etiam se et nos diligit spiritu sancto. Quia, ut dictum est diligere, prout notionaliter sumitur, non solum importat productionem divinae personae, sed etiam personam productam per modum amoris, qui habet habitudinem ad rem dilectam. Unde, sicut pater dicit se et omnem creaturam verbo quod genuit, inquantum verbum genitum sufficienter repraesentat patrem et omnem creaturam; ita diligit se et omnem creaturam spiritu sancto, inquantum spiritus sanctus procedit ut amor bonitatis primae, secundum quam pater amat se et omnem creaturam. Et sic etiam patet quod respectus importatur ad creaturam et in verbo et in amore procedente, quasi secundario; inquantum scilicet veritas et bonitas divina est principium intelligendi et amandi omnem creaturam.”

⁷⁰ *ST I* 19.2.

Secondly, the impulse of natural love in each creature towards its end is made as a likeness of the Holy Spirit and attributed to Him, because He is the impulse of love between the Father and Son.

It is also from the fact that the Holy Spirit proceeds by way of love and love has a kind of driving and moving force—that the movement which is from God in things seems properly to be attributed to the Holy Spirit.⁷¹

As the Father plans creatures to be likenesses of Himself because he first speaks the Word as the first perfect likeness of Himself that contains all the imperfect likenesses of creatures; so the Father and Son love creatures because they first love each other and all creatures in the Holy Spirit. Because of that Love and by that Love they will to give existence and motion to creatures so that the divine goodness, which they love in each other, may be diffused to creatures. Therefore the motion in each creature that arises from its directedness toward its end, i.e. toward the greatest possible participation in the divine goodness for such a nature, is an assimilation to the impulse or Love that is the Holy Spirit.

Since movement toward the end becomes self-movement in living creatures and this self-movement is the manifestation of life, the Holy Spirit is called the “Giver of Life” in the Creed. St. Thomas explains this title of the Holy Spirit in the *Summa Contra Gentiles*:

Life is manifested most in motion, for we say that things that move themselves live and in general we say this of everything, which puts itself into action. If, then, by reason of love, impulse and motion are granted to the Holy Spirit, life is also suitably attributed to Him. For John (6:64) says: “It is the Spirit who gives life”; and Ezekiel (37:5): “I will give the Spirit to you, and you shall live”; and in the Creed of our faith we profess to believe in the Holy Spirit, “the giver of life.” This also harmonizes with the name “Spirit,” for even the bodily life of animals is due to a vital spirit diffused from the principle of life into the rest of the members.⁷²

⁷¹ SCG IV 20.3: “Ex hoc etiam quod spiritus sanctus per modum amoris procedit; amor autem vim quandam impulsivam et motivam habet: motus qui est a Deo in rebus, spiritui sancto proprie attribui videtur.” See also ST I 36.1: “Nam nomen spiritus, in rebus corporeis, impulsionem quandam et motionem significare videtur, nam flatum et ventum spiritum nominamus. Est autem proprium amoris, quod moveat et impellat voluntatem amantis in amatum.; ST I 27.4: “Processio autem quae attenditur secundum rationem voluntatis, non consideratur secundum rationem similitudinis, sed magis secundum rationem impellentis et moventis in aliquid. Et ideo quod procedit in divinis per modum amoris, non procedit ut genitum vel ut filius, sed magis procedit ut spiritus, quo nomine quaedam vitalis motio et impulsio designatur, prout aliquis ex amore dicitur moveri vel impelli ad aliquid faciendum.

⁷² SCG IV 20.6: “Vita maxime in motu manifestatur: moventia enim seipsa vivere dicimus, et universaliter quaecumque a seipsis aguntur ad operandum. Si igitur ratione amoris spiritui sancto impulsio et motio competit, convenienter etiam sibi attribuitur vita. Dicitur enim Ioan. 6-64: *spiritus est qui vivificat*;

The Creed calls the Holy Spirit the “Giver of Life,” according to St. Thomas, because He proceeds by the procession of love. Love, however, is the principle of motion or impulse toward the object of love and life manifests itself in self-motion.⁷³ Furthermore, life is due to the soul or a vital spirit, which corresponds to the name of the Holy Spirit.

Since creatures are produced according to the archetypes of proceeding Word and Love, De Koninck argues, they must show traces of their divine archetypes.

Since every effect manifests in some way its cause, it is fitting to seek in creation traces of its higher cause insofar as this is the Trinity. But an effect can represent its cause in different ways. Thus smoke evokes fire, but although the smoke represents fire as cause, it does not represent the form of fire. When an effect represents only the causality and not the form of its cause, one calls it a trace. A trace (footprint) indeed shows that someone has passed by but without revealing his nature. But there are effects which represent their cause by offering a likeness of the very form of the cause, as the statue of Mercury represents Mercury and the photograph the person photographed. In these cases there is an *image*.⁷⁴

Every effect shows at least a trace or imprint of its cause, but some also represent the form of their cause. These effects may be called images of their cause. Sub-rational creatures are not properly images, according to De Koninck; they do not represent God “in form and species.”⁷⁵ Humans may be called images of God because they have intellect and will. “What preserves the image of the Trinity in us is intellect and will which are also essential and formal attributes of the

et Ezech. 37-5: *Dabo vobis spiritum et vivetis*, et in symbolo fidei nos in spiritum sanctum *vivificantem* credere profiteamur. Quod etiam et nomini spiritus consonat: nam etiam corporalis vita animalium est per spiritum vitalem a principio vitae in cetera membra diffusum.”

⁷³ See *ST* I-II 26.1: “In unoquoque autem horum appetituum, amor dicitur illud quod est principium motus tendentis in finem amatum.” [In each of these appetites, love is called that which is the principle of motion tending toward the end loved.] For discussion of the primary meaning of love as the principle of willing rather than the act of willing, see Michael S. Sherwin, O.P., *By Knowledge & By Love* (Washington, D.C.: Catholic University Press, 2005), 70-79.

⁷⁴ *The Cosmos*, 326. “Puisque tout effet représente en quelque manière sa cause, il convient de chercher dans la création des traces de sa cause suprême en tant que celle-ci est Trinité. Mais un effet peut représenter sa cause diversement. Ainsi la fumée évoque le feu; mais bien que la fumée représente le feu comme cause; elle ne représente pas la forme du feu. Lorsqu’un effet représente uniquement la causalité et non la forme de sa cause, on le nomme *vestige*. Un vestige montre bien que quelqu’un a passé par là sans en révéler la nature. Mais il y a des effets qui représentent leur cause en offrant une similitude de la forme même de cette cause, comme la statue de Mercure qui représente. Mercure, et la photographie la personne photographiée. Dans ces cas il y a *image*” (*Le Cosmos*, 122).

⁷⁵ *The Cosmos*, 327. “dans sa forme et dans son espèce” (*Le Cosmos*, 124).

divine nature.”⁷⁶ Nevertheless, lower creatures do manifest their creator in some way. De Koninck quotes from question 45 again.

But in every creature there is a representation of the Trinity in the form of trace for in everything there is something which must necessarily be reduced to the divine Persons as its cause. For every creature subsists in its being, has a form through which it is determined to a species, and has an order to something else. Insofar as it is a created substance, it represents its cause and principle, and thus points to the person of the Father, who is a principle not from a principle. Insofar as it has a certain form and species it represents the Word, since the form of an artifact is from the concept of the artisan. Insofar as it has order, it represents the Holy Spirit inasmuch as He is love, because the order of an effect to something else is from the will of the one creating.⁷⁷

All creatures, even the lowest, show a trace of the Trinity in their subsistence, their specific form and their order to an end.

The exemplar causality of the divine processions in the *representation of the Trinity* in creatures is the easiest aspect of Trinitarian causality of creation to establish from De Koninck and St. Thomas. Because Word and Love proceed within the Trinity, there is some trace of Word and Love in all creatures for they are produced outside according to their divine archetypes. *Every agent makes its like.*

(2) Divine persons as Efficient Causes

But the divine persons also exercise efficient causality. De Koninck again cites question 45 of the *Summa theologiae* on this causality:

Without doubt the divine nature is common to the three Persons, but it belongs to them in a certain order, for the Son receives it from the Father and the Holy Spirit from them both. Just so then, the creative power, although common to the three Persons, belongs to them in a certain order, that is, that the Son has it from the Father and the Holy Spirit from them. So much so that the quality of creator is attributed to the Father as to him who does not receive his creative power from another. Of the Son, it is said in St. John that *by* him everything has been made, because even while possessing the same power, he has it from another, for the preposition *by* usually indicates a

⁷⁶ *The Cosmos*, 327. “Ce qui sauve l’image de la Trinité en nous, c’est l’intelligence et la volonté qui sont aussi des attributs essentiels et formels de la nature divine” (*Le Cosmos*, 124).

⁷⁷ *The Cosmos*, 327-328; *Le Cosmos*, 124; citing *ST* I 45.7: “Sed in creaturis omnibus invenitur repraesentatio Trinitatis per modum vestigii, inquantum in qualibet creatura inveniuntur aliqua quae necesse est reducere in divinas personas sicut in causam. Quaelibet enim creatura subsistit in suo esse, et habet formam per quam determinatur ad speciem, et habet ordinem ad aliquid aliud. Secundum igitur quod est quaedam substantia creata, repraesentat causam et principium, et sic demonstrat personam patris, qui est principium non de principio. Secundum autem quod habet quandam formam et speciem, repraesentat verbum; secundum quod forma artificiatu est ex conceptione artificis. Secundum autem quod habet ordinem, repraesentat spiritum sanctum, inquantum est amor, quia ordo effectus ad aliquid alterum est ex voluntate creantis.”

mediate cause, a principle which itself has a principle. As for the Holy Spirit, who has the same power from the others, one attributes the governance as master and vivifying the creations of Father and Son.⁷⁸

While all three divine persons have one creative power as they have one essence and one being, nevertheless they possess the same creative power according to a certain order. They also produce creatures according to that same order. The Father is the absolute origin of creation, since He does not have his creative power from another, but rather is the source of the creative power of the Son and Spirit. The Son is efficient cause in a distinctive way, by being the creator who has his creative power from the Father. The Father creates through His Word, because the Word has His being, creative power, and acting from the Father. Since the Father is principle of the Son's being, He is also principle of his acting. The Holy Spirit is efficient cause in the mode of the one who has His creative power from both the Father and Son as the Love proceeding from them as from one principle. The Father and Son create through the Holy Spirit because they gave him the creative power and acting by which He creates. As the Father and Son are the principle of the being of the Holy Spirit, they are also the principle of His creating. Thus the divine persons are the efficient causes of creation according to their personal mode of existence.⁷⁹

God the Father creates through His Word, to whom He gives creative power, which is the same as the divine essence, and through the Love who receives creative power from Him and His Word. He speaks all creatures in the Word, in whom are their ideas or archetypes, but they do not

⁷⁸ *ST I* 45.6 ad. 2: "sicut natura divina, licet sit communis tribus personis, ordine tamen quodam eis convenit, inquantum filius accipit naturam divinam a patre, et spiritus sanctus ab utroque; ita etiam et virtus creandi, licet sit communis tribus personis, ordine tamen quodam eis convenit; nam filius habet eam a patre, et spiritus sanctus ab utroque. Unde creatorem esse attribuitur patri, ut ei qui non habet virtutem creandi ab alio. De filio autem dicitur per quem omnia facta sunt, inquantum habet eandem virtutem, sed ab alio, nam haec praepositio per solet denotare causam mediam, sive principium de principio. Sed spiritui sancto, qui habet eandem virtutem ab utroque, attribuitur quod dominando gubernet, et vivificet quae sunt creata a patre per filium. Potest etiam huius attributionis communis ratio accipi ex appropriatione essentialium attributorum. Nam, sicut supra dictum est, patri appropriatur potentia, quae maxime manifestatur in creatione, et ideo attribuitur patri creatorem esse. Filio autem appropriatur sapientia, per quam agens per intellectum operatur, et ideo dicitur de filio, per quem omnia facta sunt. Spiritui sancto autem appropriatur bonitas, ad quam pertinet gubernatio deducens res in debitos fines, et vivificatio, nam vita in interiori quodam motu consistit, primum autem movens est finis et bonitas;" cited in *The Cosmos*, 325; *Le Cosmos*, 121.

⁷⁹ See Gilles Emery for an illuminating exposition of what De Koninck only hints at here by quoting St. Thomas, "Personal Mode," 115-153.

come to be without also being willed or loved by the Holy Spirit. For the Father “loves Himself and every creature by the Holy Spirit, inasmuch as the Holy Spirit proceeds as the love of the first goodness by which the Father loves Himself and every creature.”⁸⁰ Hence the Father creates through His Word, which contains the ideas or forms of all things, and through the Love by which He chooses to embody or vivify this idea in a concrete being.

C. The Second Circle, First Reditus: Man Returns to God

The second circle De Koninck sees is that of rational creatures coming forth from God in creation and returning to Him by nature and by grace.

(1) By Nature

God’s gift to creation is only complete when the creatures that are the principal parts of creation receive Him and give themselves back in love. “Creation is essentially communication. His work must be capable of appreciating the gratuitous gift that communication is and that is achieved in the person,”⁸¹ explains De Koninck. There must be a circle of gift, reception, and return of gift in gratitude and love. Not implicit in De Koninck, but implied is the doctrine that the second circle of gift, reception, and return of love to creation is patterned after the first procession and the first circle between the Father and the Son, (completed in the procession of the Holy Spirit). The Gospel of John explicates the first circle as the pattern for the second circle lifted up by grace. As the Father gives Himself with love to the Son: “The Father loves the Son, and has given all things into his hand” (Jn 3:35); so the Son returns Himself in love to the Father: “I do as the Father has commanded me, so that the world may know that I love the Father” (Jn 14:31). There is a perfect mutual indwelling by love. “Believe me that I am in the Father and the Father is in me” (Jn 14:11). This circular motion of mutual indwelling is to be imitated in the

⁸⁰ *ST I* 37.2 ad 3: “Diligit se et omnem creaturam spiritu sancto, inquantum spiritus sanctus procedit ut amor bonitatis primae, secundum quam pater amat se et omnem creaturam.”

⁸¹ *The Cosmos*, 295. “La création est essentiellement une communication. Il faut que son œuvre soit capable d’apprécier le don gratuit qu’est cette communication, et qu’elle s’achève dans une personne” (*Le Cosmos*, 86).

believer. “I do not pray for these only, but also for those who believe in me through their word, that they may all be one; even as you, Father, are in me, and I in you, that they also may be in us, so that the world may believe that you have sent me” (Jn17:20-21).

Since God alone fully possesses Himself, He alone can fully give Himself. “Possession of self is a condition of the gift of self. And that is why God alone can give Himself in a full sense, for He alone possesses Himself in an absolute manner.”⁸²

God can communicate so great a share of His being to creatures, affirms De Koninck, that the highest creatures are also capable of a gift-of-self. “His communication of self is even so profound that it is terminated in beings capable of imitating Him and giving themselves in their turn.”⁸³ This implies that God also gives Himself to lower creatures insofar as He gives them being, since all being is a participation in God’s being and a concretization of a divine idea.

De Koninck agrees with the common notion that gift-of-self is most perfectly a person consciously handing over the gift of his person or a participation in his being to another.⁸⁴ “Only the rational creature is able to give himself, in the measure that he is capable of possessing himself.”⁸⁵ However, De Koninck also uses “gift-of-self” in an analogical sense of animals, plants and even inanimate matter. “Already the non-living begs to be given; it gives out of its desire to be given by its natural appetite.”⁸⁶ In the same way that St. Thomas speaks of desire analogically even of inanimate things, because they have a tendency toward their end,⁸⁷ De Koninck speaks of gift-of-self, analogically, because everything in act communicates act. Whatever has being or act

⁸² *The Cosmos*, 308. “La possession de soi-même est une condition du don de soi” (*Le Cosmos*, 102).

⁸³ *The Cosmos*, 308. “Sa communication de soi est même si profonde qu’elle se termine en des êtres capables de l’imiter et de se donner à leur tour” (*Le Cosmos*, 102).

⁸⁴ However, he does not limit conscious acts to what is freely chosen. De Koninck would not exclude consciousness from the Father’s gift of the divine essence to the Son.

⁸⁵ *The Cosmos*, 308. “Il n’y a que la créature rationnelle qui puisse se donner, dans la mesure où elle est capable de se posséder” (*Le Cosmos*, 102).

⁸⁶ *The Cosmos*, 303. “déjà le non-vivant mendie pour donner: il donne par son désir d’être donné, par son appétit naturel” (*Le Cosmos*, 94-95).

⁸⁷ *ST I 5.4*: “Bonum sit quod omnia appetunt.”

gives its act as long as it exists. “Fruitfulness is a necessary property of every being,”⁸⁸

Nevertheless, De Koninck regards God’s gift-of-self as unique.

God alone can give Himself in a full sense, for He alone possesses Himself in an absolute manner. His communication of self is even so profound that it is terminated in beings capable of imitating Him and giving themselves in their turn; although God is the absolute cause of the gift of self in all intellectual creatures.⁸⁹

God alone possesses Himself completely, in the perfect and simultaneous possession of His life of knowledge and love. No one gives Him life or ends His life; His power to bring about whatever communication of self He desires is infinite. There is no possibility of failure in his commitments. “The faithfulness of the Lord is everlasting” (Ps 117:2). Humans, however, fail in many ways in their commitments; they can only give themselves to the extent that they possess themselves. Since they have reason and freewill, they are, to some extent, “lord of their acts.”⁹⁰ Nevertheless, their self-possession is limited. They receive their life and it can be taken from them at any instant; they may lack the virtue to control their passions; they lack the power to do or give all that they wish. Their gift-of-self is always imperfect.

Thus there are degrees of self-gift corresponding to the degree of self-possession. God both possesses Himself and gives Himself to the most eminent degree. Rational creatures both possess themselves and give themselves to a lesser degree. Sub-rational creatures possess and give themselves still less, in a lower analogical degree.

As we have already seen in De Koninck, God gives Himself in creation, because He wants to manifest Himself to a person or persons. If God were to create only subhuman species, there would be no creature that could consciously accept the gift of being and be grateful to the giver.

If God creates, necessarily He creates in order to manifest His glory outside, not to manifest it to Himself, as if by creation He could grow in His own regard. Creation is essentially communication. His work must be capable of appreciating the gratuitous gift that communication

⁸⁸ “Divine Fruitfulness.” “La fécondité est par conséquent une propriété nécessaire de tout être” (“La fécondité Divine,” Appendix 3).

⁸⁹ *The Cosmos*, 308. “Dieu seul peut se donner au sens plein, car lui seul se possède d’une manière absolue. Sa communication de soi est même si profonde qu’elle se termine en des êtres capables de l’imiter et de se donner à leur tour, bien que Dieu soit cause absolue du don de soi de ces créatures intellectuelles” (*Le Cosmos*, 102).

⁹⁰ ST I-II 6.2 ad 2: “Homo est dominus sui actus.”

is and that is achieved in the person, that is, in an intellectual creature who can give glory to his Principle. That is why God could not create a cosmos, which was not essentially ordered to an intracosmic intelligence.⁹¹

God creates to communicate His glory: first, God wants to give a share in His being, goodness, and beauty to creatures; second, God wishes to manifest His glory, not to Himself but to his creatures. However, rocks, plants, and animals cannot appreciate His glory; only an intellectual creature can see his glory revealed in creation and rejoice in it. Therefore the cosmos would make no sense without men and women who can study the book of nature and read God's glory revealed in it. The second communication, giving knowledge, is an extension of the first, giving being. The greatest way that God can communicate His goodness to creatures is by giving Himself to them in knowledge and love. The communication of being is for the sake of communication of knowledge. The cosmos is finally for the sake of rational creatures; they alone can see God's glory revealed in it and praise Him for it. Only through and in the human person can the cosmos return to its creator, its principle, and give Him glory. Angels also give glory to God for the cosmos, but not from within it, as parts. Although they are involved in cosmic history in many ways, according to De Koninck, still, as pure spirits, they are not formally parts of the corporeal cosmos.⁹²

But the particular end of the cosmos ought to be interior to the cosmos. If mobile being as such cannot be that end since it is only a means, its reason for being is essentially utilitarian. But its existence cannot be useful for a pure spirit. That is why a pure spirit cannot be the *raison d'être* of the cosmos.

The being in which resides the end of the cosmos must be both immobile and cosmic; both spirit and matter must be found in it...

Man is manifestly the *raison d'être* of the whole of nature. Moreover, nature could not be ordered to God except through man. God being the end of the universe,⁹³ it is necessary that the universe

⁹¹ *The Cosmos*, 295; modified translation. "Si Dieu crée, nécessairement Il crée pour manifester sa gloire au dehors, et non pas pour se manifester à soi-même, comme si par la création Il pouvait se grandir à son propre regard. La création est essentiellement une communication. Il faut que son œuvre soit capable d'apprécier le don gratuit qu'est cette communication, et qu'elle s'achève dans une personne, c'est-à-dire dans une créature intellectuelle qui puisse rendre gloire à son Principe. C'est pourquoi Dieu ne pourrait créer un cosmos qui ne soit essentiellement ordonné à une intelligence intracosmique" (*Le Cosmos*, 86).

⁹² *The Cosmos*, 285-286; *Le Cosmos*, 67-68.

⁹³ Although De Koninck uses "universe" [l'univers] here instead of "cosmos" [cosmos] the context makes clear that he means the physical cosmos. The section's title is *The Reason d'être of the Cosmos* [*La Raison d'être du Cosmos*] and the first and second sentence of the paragraph refer to nature being ordered

be capable of a return to its Universal Principle—of a *reditio ad principium*. But only an intellectual creature is capable of such return.⁹⁴

Sub-rational beings need the cosmos in order to exist, but cannot know God; pure spirits do not need the cosmos in order to exist or to know God. For this reason, according to De Koninck, matter was created for the sake of man either as nature that is essentially the urge or desire for the human form, or as a principle of man, or for the maintenance of human life, or as the object of man's knowledge since he cannot come to know immaterial things like God except through sensation and images. "Man is in the last instance the *raison d'être* of matter."⁹⁵ Matter is for the sake of becoming man, being man, maintaining man, or being known by man.

The cosmos becomes present to itself when a part of it, man, knows the cosmos and knows himself knowing it. In knowing the cosmos, man can know being itself (dimly), not only cosmic being, but also the Author of being. Thus man makes a return to his origin, God, by "reaching" Him or thinking Him with his intellect. Man reaches his perfection by this return because God is the universal cause of being and truth. God is Being and Truth essentially while man and all cosmic beings merely participate in being and truth.

De Koninck writes much about the return of creation to the first principle because he understands the circular motion of *exitus* (going out from God in creation) and *reditus* (return to God) as the fundamental pattern of the universe, mirroring the circular motions in the Trinity. De

to God. Although De Koninck usually uses cosmos for the physical world and universe for all of creation including spirits, he does occasionally use "universe" for "cosmos" as when he says, "In order for the world [le monde] to have a *raison d'être*, in order for it to be profoundly one and a universe [l'univers], it is not enough that it be composed of parts and that these parts physically constitute a whole..." (*The Cosmos*, 296; *Le Cosmos*, 137).

⁹⁴ *The Cosmos*, 264. "Or la fin particulière du cosmos doit être intérieure au cosmos. Si l'être mobile en tant que tel ne peut être fin, il n'est que moyen – sa raison d'être est essentiellement utilitaire. Or, son existence ne peut être utile à un esprit pur. Donc, l'esprit pur ne peut être sa raison d'être.

Donc, l'être en qui consiste la fin du cosmos doit être à la fois immobile et cosmique. Il faudra donc trouver en lui à la fois esprit et matière...

L'homme est manifestement la raison d'être de la nature entière. D'ailleurs, la nature ne pourrait être ordonnée à Dieu que par l'homme. Dieu étant la fin de l'univers, il faut que celui-ci soit capable d'un retour à son Principe Universel – d'une *reditio ad principium*. Or, seule une créature intellectuelle est capable de ce retour" (*Le Cosmos*, 35).

⁹⁵ *The Cosmos*, 265. "L'homme est, en dernière instance, la raison d'être de la matière" (*Le Cosmos*, 36).

Koninck wishes to understand things in their causes, especially in the first of causes, the good. Every act is for the sake of some good. Since God is the Supreme Good, He always acts for the sake of His own goodness. He only goes out from Himself in the act of creation in order to bring everything back to Himself so that creatures can also enjoy a share of His goodness.

In human intelligence the cosmos not only becomes present to itself, this presence opens on the whole of being and thus it can realize an explicitly lived return to the First Principle of being—God, who draws the world from Himself in order to ‘speak’ Himself by it, and which thus opens an abyss [in the human heart] where He can make His abode.⁹⁶

De Koninck says that God creates an “abyss” in the human heart by giving them an intellect and will, directed toward Being itself and Goodness itself, in other words “hungry for Him,” so that they can never be satisfied by anything less than a return to their creator. De Koninck even calls human intellectual powers *divine* because they touch God. “That is why intellect and will are faculties of the divine, since by them the universe rejoins its creator in an explicit manner, thus accomplishing the ultimate end of all creation”⁹⁷

(2) By Grace

By nature, humans can only know their creator by His effects, which are not even accidents of Him; they can return to Him only by a very meager knowledge and love. De Koninck speaks of the inadequacy of this knowledge: “We also know that this knowledge is superficial, that God has properties which are absolutely His own, that the light in which He is seen and which is identified with Him surpasses absolutely the created light in which we know Him in the most inadequate way.”⁹⁸ We can only achieve a fulfillment that is partial in the natural order.

⁹⁶ *The Cosmos*, 305. “Dans l’intelligence humaine le cosmos ne devient pas seulement présent à soi-même: cette présence l’ouvre sur l’être tout entier, et par là il peut désormais réaliser un retour explicitement vécu au Premier Principe de l’être – Dieu, qui tire à Soi le monde afin de Se faire ‘dire’ par lui, et qui creuse ainsi un abîme où Lui-même pourra faire sa demeure” (*Le Cosmos*, 97).

⁹⁷ *The Cosmos*, 327. “C’est pourquoi l’intelligence et la volonté sont avant tout des facultés du divin, puisque par elles, l’univers rejoint son Créateur d’une manière explicite, accomplissant ainsi la fin dernière de toute création” (*Le Cosmos*, 124).

⁹⁸ *The Cosmos*, 322. “nous savons aussi que cette connaissance est superficielle, que Dieu a des propriétés qui sont absolument siennes, que la lumière dans laquelle il se voit et qui s’identifie à lui dépasse absolument la lumière créée dans laquelle nous le connaissons de la manière la plus inadéquate” (*Le Cosmos*, 118).

However the natural order is for the sake of the supernatural order in which men can return to God through faith and the supernatural friendship of charity.

But Revelation teaches us that...God has deigned to communicate another gift, infinitely more profound than the first, by which we can participate in His intimate and properly supernatural life...by that gift the intellectual creature becomes capable of realizing an explicit return to God, not only under the general note of being, but under the proper notion of deity...He manifests Himself to us in faith where we participate in God's own knowledge and will, but in an obscure fashion; and finally in the beatific vision of the blessed who see Him face to face.⁹⁹

God wishes to communicate Himself abundantly. He makes us "partakers of the divine nature" (2 Peter 1:41) and calls us His friends (Jn 15:15). Already on earth, God dwells in our hearts by faith and charity. "In that day you will know that I am in my Father and you in me, and I in you...If a man loves me, he will keep my word, and my Father will love him, and we will come to him and make our home with him." (Jn 14:20,23). In heaven, God will unite Himself to men as the object of their knowledge and love. "We shall be like him, for we shall see him as he is" (1 Jn 3:2).

(3) By the Incarnation

There is a third way, unmentioned in *The Cosmos*, for man to return to God, by the Incarnation. Man is elevated to the divine order. Jesus Christ is both true man and true God. He not only partakes of the divine nature, He is God. The natures are united in the person of God the Son. I will reflect at length on the return to God in Christ in the treatment of "Mercy in the Incarnation" in chapter six.

D. The Second Circle, Second Reditus: Man Returns the Cosmos to God

When man returns to God, he brings the cosmos with him, according to De Koninck. The first return is by nature; the second is by grace.

⁹⁹ *The Cosmos*, 322. Or, la Révélation nous apprend que... Dieu a daigné nous communiquer un autre don; infiniment plus profond que le premier, par lequel nous pouvons participer à sa vie intime et proprement surnaturelle... Et par ce don la créature intellectuelle devient capable de réaliser un retour explicite à Dieu, non seulement sous la raison générale de l'être, mais sous la raison propre de la déité... il se manifeste à nous dans la foi où nous participons à la connaissance et la volonté propres de Dieu, mais de façon obscure; et enfin dans la vision béatifique les bienheureux le voient face à face (*Le Cosmos*, 118).

(1) By Nature

De Koninck says that man unites the cosmos in his own being and thought. One can even say that he *is* the cosmos in miniature. “Man is a ‘microcosm,’ not only because in the ontological line he *contains* in himself all the degrees of being in nature, but above all because in the intentional line he *is* potentially all things.”¹⁰⁰

De Koninck calls man a *microcosm*, because he contains formally all the levels of being in the cosmos. He is a body like inanimate bodies, having weight and rigidity; he has vegetative powers like plants; he needs to nourish himself, grow, and reproduce; he has sensitive powers like the animals; he can see and hear and feel; he can desire and fear; but he surpasses all cosmic beings because he is rational.

The universe in expansion from the physical point of view rebounds on itself in life...It arrives finally at man in whom the world succeeds in uniting all the degrees of cosmic being, and in thought in which it touches and compenetrates itself.¹⁰¹

Thus, De Koninck explains, man *is* the cosmos in two ways: first because he contains virtually the powers of all other cosmic beings; second, because he can unite all cosmic beings in his understanding “Rebounds” is a striking word because the ball must move out to hit the wall

¹⁰⁰ *The Cosmos*, 302, emphasis added. “L’homme est un ‘microcosme’, non seulement parce que dans la ligne ontologique il contient en lui tous les degrés d’être de la nature, mais surtout parce que dans la ligne intentionnelle il est puissance de toutes choses” (*Le Cosmos*, 94).

De Koninck uses the term microcosm for man as many Fathers used it. For example, see St. John Damascene’s *On the Orthodox Faith*:

God then made man without evil, upright, virtuous, free from pain and care, glorified with every virtue, adorned with all that is good, like a sort of *second microcosm within the great world*... Man, it is to be noted, has *community with* things inanimate, and *participates in* the life of unreasoning creatures, and *shares in* the mental processes of those endowed with reason. For the *bond of union* between man and inanimate things is the body and its composition out of the four elements; and the *bond* between man and plants consists, in addition to these things, of their powers of nourishment and growth and seeding, that is, generation; and finally, over and above these *links* man is *connected with* unreasoning animals by appetite, that is anger and desire, and sense and impulsive movement. There are then five senses, sight, hearing, smell, taste, touch. Further, impulsive movement consists in change from place to place, and in the movements of the body as a whole and in the emission of voice and the drawing of breath. For we have it in our power to perform or refrain from performing these actions. Lastly, man’s reason *unites him to* incorporeal and intelligent natures, for he applies his reason and mind and judgment to everything, and pursues after virtues, and eagerly follows after piety, which is the crown of the virtues. *And so man is a microcosm*. John of Damascus, *De fide orthodoxa*, II, 12; emphasis added.

¹⁰¹ *The Cosmos*, 298. “L’univers, en expansion au point de vue physique, rebondit sur lui-même dans la vie, constituant dans cette contraction des centres de plus en plus denses, des noyaux de plus en plus hétérogènes. Il aboutit finalement à l’homme dans lequel le monde réussit à unir tous les degrés d’être cosmiques, et en la pensée duquel il se touche et se compénètre” (*Le Cosmos*, 90).

before it returns to the sender. Man must go out with his senses to meet the world and then bring it back to his intellect to understand. Man *must* contain the cosmos ontologically; man *can* contain “all the riches of the world” intentionally, at least dimly, when he understands that all cosmic beings flow from God and reflect His glory. As Aristotle said, “The soul is, in a way, all things.”¹⁰²

When man returns to God by knowing, loving, and praising Him, man necessarily brings the cosmos with him, in the first way, ontologically; since he cannot help summing up infrahuman nature in his being. Since he is an animate sensitive rational body, when he praises God, a representative animate sensitive, rational body praises God.

In the second way, intentionally, man can bring the cosmos with him back to God more or less consciously and with more or less detail. We cannot know about God at all without knowing his creatures since all our knowledge begins in the senses. Therefore, it is impossible to know and love God without understanding God as creator and creatures as created. However, man can consciously strive to understand creation better in order to praise God for it.

It is difficult for modern man to understand how humans can return the cosmos to God because individualism is so emphasized. The right of each enfranchised person to think, say, and do whatever he chooses is exalted over truth and the dignity of life. The rhetoric of the woman’s movement, the minority rights movements, and the gay rights movement is principally about seizing power rather than about serving the common good. Nevertheless, humans are more truly parts than wholes. They are born as parts of a family, parts of a state, and parts of the cosmos for the sake of being reborn as parts of the Body of Christ. They depend on their parents until maturity, on the political and economic system of their state, and on the whole ecosystem of earth from birth to death. They are most clearly dependent on their mother in the womb; if she stops breathing, they will die. They can never achieve happiness alone. The worst human punishment aside from death is solitary confinement.

¹⁰² Aristotle, *De Anima* III.8 (431b20); cited by St. Thomas numerous times.

Humans possess a common good as members of the cosmos as well as members of their state or family. The common good is not alienated from the individual but is truly the individual's greater good. Shakespeare calls the King, "England,"¹⁰³ because he understands that the good of the head of the State is the good of the state. The way one treats the king is the way one treats his country. It is good for every Englishman that his king is treated with honor. It is better for any other Englishman to be spit upon than for his king to be spit upon.

Sub-rational creatures cannot know God but they serve the principal members of the cosmos, humans, who can know God. They achieve perfection as parts of the cosmos, because only as parts can they give glory to God through the praise of humans. The operations of humans belong to the whole cosmos to the extent that it is one; therefore they belong to each of its parts as operations of the whole to which they belong.

Rational creatures can attain by themselves in an explicit manner the good to which all things are ordered; they differ in this from irrational creatures, who are pure instruments, who are useful only and who do not attain by themselves in an explicit manner the universal good to which they are ordered.¹⁰⁴

De Koninck means that irrational creatures only attain God "the universal good to which they are ordered" through serving as instruments to humans, who can attain Him. But irrational beings can attain God in that way and it is their greatest good to do so. They attain God more profoundly as parts of the cosmos than they do as individual creatures who reflect Him in a small way by their being and operations.

A contemporary example of a part achieving the good of the whole through the operations of a more principal part might be a student and the president of a college. The president of a college acts for the whole college, as principal part. When the president of a college welcomes a distinguished visitor, he does so in the name of the whole college. In other words, the college

¹⁰³ William Shakespeare, *The Complete Works*, general editors, Stanley Wells and Gary Taylor (Oxford: Clarendon Press, 1986, 2nd ed. 2005), *Henry V*, Act II, scene 4 (114-115). "Tomorrow shall you bear our full intent / back to our brother England."

¹⁰⁴ *The Primacy of the Common Good*, 88. "Les créatures raisonnables peuvent atteindre d'elles-mêmes de manière explicite le bien auquel toutes choses sont ordonnées; elles diffèrent par là des créatures irraisonnables, qui sont de purs instruments, qui sont utiles seulement et qui n'atteignent pas elles-mêmes de manière explicite le bien universel auquel elles sont ordonnées" (*Le Primauté du Bien Commun*, 131).

welcomes the visitor through the words of its head or principal part. Later in the day, a student could say to the visitor, “When we welcomed you today...” meaning that the body to which he belongs welcomed the visitor, through its head.

In a sense, man acts like the college president for the whole cosmos; humans are the principal parts of the cosmos. The psalms of praise are an expression of the work of man to bring the cosmos back to God.¹⁰⁵ Humans complete the cosmos by giving it a voice so that it becomes capable of praising God. “Praise him, sun and moon, praise him, all you shining stars!” (Ps 148:3). De Koninck expresses the same thought when he calls the world “a hymn.”

A world cannot exist in order to be indefinitely separated from its own existence, and indefinitely separated from itself by space. By the very fact that it is made for intelligence, it is necessary that it be able to be present to itself; it is necessary that an intelligence be able to restore this entire ensemble to its principle, and that the world become a kind of *hymn*. [cantique]¹⁰⁶

The world was created sensible and intelligible so that it could be sensed and understood. A beautiful cosmos calls for a sensitive and intelligent observer to appreciate its beauty. The many levels of complexity and order of the cosmos call for an intelligence to discover and rejoice in its order. The cosmos would be radically incomplete without man. Man has an obligation to the creator to study His creation, “For from the greatness and beauty of created things comes a corresponding perception of their Creator” (Wis.13:5). De Koninck writes that technological progress is principally valuable for allowing us to grasp the cosmos more comprehensively in our intelligence.

The progress of navigation and aviation, the perfecting of telescopes, and the means of long distance communication supplied by modern technology are conquests for intelligence. The ultimate end of these emancipations is not control of the shipping of beans and bananas, nor weather prediction; it is more profoundly the exploration of the world with an eye to gathering it

¹⁰⁵ *The Song of the Three Young Men* (an addition to *Daniel* from Septuagint inserted in RSV in chapter 23 dividing verse 23) and the many psalms of praise like Psalms 8, 19, 29, 65, 96, 104, 135, 136, and 148 give hymns of praise to dumb creation through the words of men.

¹⁰⁶ Charles De Koninck, Unnamed fragment: “Or un monde ne peut exister pour être indéfiniment séparé de son existence, et indéfiniment séparé de lui-même par l’espace. Par le fait même qu’il est fait pour l’intelligence, il faut qu’il puisse être présent à lui-même ; il faut qu’une intelligence puisse ramener tout cet ensemble à son principe, et que le monde devienne une espèce de cantique.” (Charles De Koninck Archive. Folder 20: Part 7, p.12). Translated by David Quackenbush; emphasis added.

to a point, and contemplation.¹⁰⁷

Everyone need not be a scientist, but De Koninck considers it a great good for the human race to have scientists that can extend the knowledge of man across the vast stretches of the cosmos and back billions of years in time. Man unites the disparate parts of the cosmos, diffused in time and space, gathering the world “into a point” in his intellect. Of course, mankind is many and has many individual intellects but since truth is a common good, there ought to be and is a certain shared progress and possession of the truth.

De Koninck rejoiced in the explosion of knowledge about the cosmos in experimental science, which is continuing today. We can praise God, in detail, both for the very small, for the intricate workings within living cells, and for the very large, millions upon millions of stars and nebulae, which King David could not praise God for, in the psalms, because he did not know all that we know now.

The more profoundly the cosmos reveals God’s glory to man, the more profoundly man can glorify God and the more perfectly the cosmos will achieve its goal. God’s gift-of-self to creation in giving it being and activity is completed when man returns the cosmos to God by joining himself to God through knowledge and love and praise. Man glorifies God by praising and thanking Him for all that He has made and done. This glorifying God perfects man and all the cosmos through man. “Make a joyful noise to the Lord, all the earth; break forth into joyous song and sing praises!” (Ps 98:4).

According to De Koninck (whose doctrine agrees with *Romans* 1:20-21), even in the natural order humans should honor and thank God for creation. They should make a return of creation to its creator; this alone completes the circular path of the cosmos and brings it to perfection.

At the origin there was only natural appetite in the world, without knowledge in the subject and without intelligence. And yet the intrinsic ultimate end of the world is already inscribed in it as the

¹⁰⁷ *The Cosmos*, 302. “Les progrès de la navigation et de l’aviation, le perfectionnement des télescopes et des moyens de communication à distance que permet la technique moderne sont des conquêtes pour l’intelligence. La fin ultime de ces affranchissements, ce n’est pas la commande ou le transport de haricots et de bananes, ni la prédiction de temps pluvieux, c’est profondément l’exploration du monde en vue de le ramasser en un point, et la contemplation” (*Le Cosmos*, 94).

term of its natural tendency. The goodness of man is so great that it extends itself to the very first instant of the existence of this universe that it draws to itself...It is thus that matter is, in all its essence, a love of the human soul in which love becomes consubstantial. And it is just toward consubstantial love that the whole universe tends, that is, toward the love of self for itself, not doubtless as ultimate end, but as the precondition of the explicit return to the First Principle by love.¹⁰⁸

From the beginning, the cosmos was drawn by love of the creator from whom it came. It tended toward man because only through man could it return to God by conscious love.

(2) By Grace

By grace, man will bring the cosmos more profoundly back with him to God. On earth, he is united to God by the divine indwelling through faith and charity. In heaven, man is united to God through the beatific vision and charity. Here we see a secondary reason for the resurrection of the body. The body, a physical part of the cosmos, participates in beatitude; a rational body sees God. This seeing is not only with the eyes of the mind but, with his bodily eyes, man sees God-made-man. “The throne of God and of the Lamb shall be in it, and his servants shall worship him; they shall see his face” (Rev 22:3-4). The saints see the face of God in the face of the Lamb of God, who is Christ. “And the city has no need of sun or moon to shine upon it, for the glory of God is its light and its lamp is the Lamb.” (Rev 21:22). The Lamb is the lamp in which the saints see God’s glory in the flesh.

Furthermore, among the truths man will see in God are some “which concern nature itself as nature but that we could in no way know by the light of reason... Nature hides riches and passive

¹⁰⁸ *Cosmos* 308-309. “À l’origine il n’y avait dans le monde qu’un appétit naturel, sans connaissance dans le sujet et sans intelligence. Et pourtant la fin dernière intrinsèque du monde est déjà inscrite en lui comme terme de sa tendance naturelle. La bonté de l’homme est si grande qu’elle s’étend jusqu’au premier instant de l’existence de cet univers qu’elle tire à soi. Tout appétit suppose en effet une certaine conformité de l’aimant et de l’aimé, soit une conformité en acte, soit une conformité à raison de la puissance en tant que proportionnée à l’acte auquel elle est essentiellement ordonnée – secundum quod potentia habet similitudinem ad actum ipsum, nam ipsa potentia quodammodo est actus. Et c’est ainsi que la matière est, de toute son essence, un amour pour l’âme humaine en laquelle l’amour devient consubstantiel. Et c’est justement vers l’amour consubstantiel que tend l’univers tout entier, c’est-à-dire vers l’amour de soi-même par soi-même, non sans doute comme fin dernière absolue, mais comme condition préalable du retour explicite au Premier Principe par l’amour” (*Le Cosmos*, 102-103).

potencies which are only open to the gaze of their supreme cause.”¹⁰⁹ Man will see and unite all of the parts of the cosmos, which were diffused in time and space in his vision of God.

This [cosmic] unity will be preserved in the future, not by its diffusion, but in the intense unity of man where all the perfections now diffused in the biological species will be united in a single species...It is on the side of intelligence that one should seek the unity of the world: unity conditioned by the distinction of things according to form and not by confusion of matter.”¹¹⁰

Humans will see all of the biological species and all the beauties and complex interactions of the cosmos united in their path flowing from God and returning to Him through mankind. In heaven the saints will praise God for the cosmos and all of creation forever:

The twenty four elders fall down before him who is seated on the throne and worship him who lives forever and ever...“Worthy are you, our Lord and God, to receive glory and honor and power, for you created all things, and by your will they existed and were created” (Rev 4:11).

The saints will not forget the cosmos or lose anything good that was contained in it. They will continue to possess the cosmos in their memory and vision and praise God for all of creation and its history forever.

(3) *By the Incarnation*

De Koninck does not mention the Incarnation in *The Cosmos*, yet it is clearly the most striking return of the cosmos to God. The cosmos, in one of its principal parts the man Jesus Christ, is assumed into personal union with God the Son. Then the human race becomes incorporated in the body of Christ. In *Ego Sapientia*, however, De Koninck does speak about the return of the cosmos to God in the Incarnation: “This same Son arises from two extremes of the universe, reuniting our lowliness with His supreme grandeur.”¹¹¹ This is the principle reason *The Cosmos* needs elaboration by considering its doctrine about evolution in light of the doctrine

¹⁰⁹ *The Cosmos*, 323. “qui concernent la nature même en tant qu’elle est nature, mais que nous ne pouvons nullement connaître dans la lumière de la raison... la nature cache ainsi des richesses et des puissances passives qui ne sont ouvertes qu’au regard de leur cause suprême” (*Le Cosmos*, 119).

¹¹⁰ *The Cosmos*, 318-319. “Cette unité sera conservée dans l’avenir, non pas dans sa diffusion, mais dans l’unité intense de l’homme où toutes les perfections maintenant diffuses dans les espèces biologiques seront unies en une seule espèce... c’est encore du côté de l’intelligence qu’il faut chercher l’unité du monde: unité conditionnée par la distinction des choses selon la forme, et non pas par la confusion dans la matière” (*Le Cosmos*, 113-115).

¹¹¹ *Ego Sapientia*, 27. “Ce même Fils surgit aux deux extrémités de l’univers, réunissant notre bassesse avec sa suprême grandeur” (*La Sagesse*, 85).

about the Incarnation in *Ego Sapientia*. Charles De Koninck's cosmology needs to be completed by a consideration of its fulfillment in Christ and the economy of salvation.

3. Conclusion

We have seen a remarkable treatment of gift-of-self in De Koninck's doctrine of nature and evolution. Instead of interpreting evolution as the result of a brutal battle for survival, De Koninck interprets it as result of love and gift-of-self. Nature is love for the form of man because, only through man, can nature return to its creator. In reproduction, every cosmic being gives itself out of love for its specific life, which it desires to pass on to its progeny. Certain organisms, like unicellular ones that reproduce by division, die in order to reproduce. Many animals will risk death for the sake of preserving their offspring. However, in the reproductive acts that lead to mutated offspring, the parents sacrifice their specific life for the sake of the common good of the cosmos, humanity. They act out of love for the principal parts of the cosmos that will enable it to return to God in love.

Thus love for man and through man, God, is the bond that unites all the parts of the cosmos in their historical paths to form one great circle of love, coming out from the creator as inanimate matter and returning to the creator as man. This circle imitates the circle of love in the Trinity. The Son comes forth from the Father and returns to Him in the Holy Spirit.

Before I take up the ways the cosmos's circle of love and gift-of-self is enhanced by evolution (chapter seven), I will consider De Koninck's treatment of mercy, principally in his book on Mary *Ego Sapientia*. In chapter six, I will note in particular mercy's application to the Incarnation. Then I will be ready to complete De Koninck's cosmology by his Christology. I will apply what De Koninck says about mercy, gift-of-self, and circular motion to a deeper interpretation of an evolving cosmos.

CHAPTER SIX: MERCY

We have looked at the doctrine on circularity in De Koninck's *Ego Sapientia*. The second half of the book is about the role of the Blessed Virgin in the economy of salvation, and her attribute of mercy. In this chapter, I will lay out the doctrine of mercy found in *Ego Sapientia*. Then in chapter seven, I will apply De Koninck's insights into mercy to make the argument that evolution involves more mercy than instantaneous creation of species. I shall also argue that evolution involves more gift-of-self and a more profound return to its principle than instantaneous creation of species. Evolution enables the cosmos to manifest its Trinitarian creator more perfectly. In order to make this argument, I will be drawing out connections between evolution and the Incarnation that De Koninck does not explicitly make. However, the connections I discover make a bridge between the theologian's Marian theology in *Ego Sapientia* and his cosmology in *The Cosmos*.

Ego Sapientia is a systematic book of Marian theology using Scripture, the Fathers, and the Doctors of the Church to explain how the Church can apply "all that is said of Wisdom in the Sapiential Books"¹ to Mary. In the first half, entitled "Ego Sapientia"² De Koninck explains how Mary is rightly called not just wise, but wisdom itself. In the second half entitled "Nigra sum, sed Formosa,"³ De Koninck seeks to understand Mary's lowliness, which he sees described in the line from the *Song of Songs*, "I am black, but beautiful" (Song 1:5). He answers the question, "What

¹ *Ego Sapientia*, 4; "tout ce que la Sagesse dit d'elle-même dans les Livres sapientiaux" (*La Sagesse*, 17).

² Chapters 1-16.

³ Chapters 17-42.

connection could there be between the attribution of wisdom and of blackness that signifies a state of inferiority?”⁴

De Koninck answers this question in several steps. In the first step (Ch. 17,18), he makes two general points about mercy, both of which will be vital to our argument about evolution. The first point is that mercy is the root of everything God does externally (Ch. 17). The second point concerns the criteria according to which the degrees of mercy are to be judged (Ch. 18). In the second step, he shows in how many ways mercy is shown in the Incarnation (Ch. 19-20). In the third step, he shows how Mary is raised to be both Mother and Queen of Mercy and therefore Wisdom (Ch. 31-35). In the fourth step, he compares the humility and victorious power of Mary to the pride and ultimate defeat of Satan and sinners (Ch. 36-42).⁵

Most important for this work on evolution will be the first two steps. I will show how mercy is intensified through evolution because it intensifies both the lowliness of the bending down and the greatness of the lifting up in the Incarnation.

1. The Definition of Mercy

Since De Koninck begins the second half of *Ego Sapientia* with several long citations from Question 21 in the Prima Pars, I will begin by looking at St. Thomas’s two definitions of mercy in Question 21. The first definition is in article three, where St. Thomas says that there are two elements belonging to mercy.

Someone is called merciful (*misericors*) because he has a sorrowful heart (*miserum cor*) since he is affected with sorrow by another’s misery. From this it follows that he works to take away the misery of the other as if it were his own, and this is the effect of mercy. To sorrow, therefore, over the misery of another does not belong to God, but to take away misery does belong most properly to God, if we understand by misery, any kind of deficiency. Defects are not taken away except by some perfection of goodness [being given], but God is the first origin of goodness.⁶

⁴ *Ego Sapientia*, 21. “Quel rapport y aurait-il entre l’attribution de sagesse et celle de noirceur qui signifie un état d’infériorité?” (*La Sagesse*, 67).

⁵ This outline of *Ego Sapientia* owes much to Katherine Gardner’s paper, “A Wheel within Wheels: Circularity and Procession in Charles de Koninck’s *Ego Sapientia*.”

⁶ *ST I* 21.3: “*Misericors dicitur aliquis quasi habens miserum cor, quia scilicet afficitur ex miseria alterius per tristitiam, ac si esset eius propria miseria. Et ex hoc sequitur quod operetur ad depellendam*

The first element of mercy, according to St. Thomas, is to feel sorrow over another's misery; this cannot belong properly to God since He has no passions. The second element is to take away the misery by some acts. This belongs most of all to God since misery is taken away by giving some good and God is the first source of all that is good. Thus mercy, as it applies to God, belongs to His efficient causality. He is merciful because He acts to take away misery by bestowing gifts.

The second definition of mercy is in article four, where St. Thomas argues that mercy can be found in all the acts of God.

Mercy and truth are necessarily found in every work of God if mercy is taken for the removal of any deficiency whatsoever; although not every deficiency is properly called misery, but only a deficiency in a rational nature which can be happy; since misery is opposed to happiness.⁷

St Thomas defines mercy in the broadest sense as the removal of any deficiency at all. The remedy of a defect must be gratuitous or it is an act of justice and not mercy. (To pay a debt is not merciful, but just.) If mercy is defined in this extended sense, it can include actions towards creatures that are not rational even though they cannot, formally speaking, be miserable and so cannot truly be relieved of misery.

Mercy is in itself the highest virtue, De Koninck tells us, because it is the virtue of the “superior precisely as superior.”⁸ He cites St. Thomas:

A virtue can be the highest in two ways: in one way, taken in itself; in another way, by comparison to the one having it. —In itself indeed mercy is the highest, for it pertains to mercy that it flows to the other, and what is more, that it makes up for the defects of the other; and this belongs most to the superior. Hence to be merciful is said to be proper to God, and in it His omnipotence is especially made manifest.⁹

miseriam alterius, sicut miseriam propriam, et hic est misericordiae effectus. Tristari ergo de miseria alterius non competit Deo, sed repellere miseriam alterius, hoc maxime ei competit, ut per miseriam quemcumque defectum intelligamus. Defectus autem non tolluntur, nisi per alicuius bonitatis perfectionem, prima autem origo bonitatis Deus est.”

⁷ ST I 21.4: In quolibet opere Dei misericordia et veritas inveniantur; si tamen misericordia pro remotione cuiuscumque defectus accipiat; quamvis non omnis defectus proprie possit dici miseria, sed solum defectus rationalis naturae, quam contingit esse felicem; nam miseria felicitati opponitur.

⁸ *Ego Sapientia*, 22. “du supérieur en tant que supérieur” (*La Sagesse*, 70). The French version will always be the second version listed in the notes.

⁹ ST II-II 30.4: “Aliqua virtus potest esse maxima dupliciter, uno modo, secundum se; alio modo, per comparisonem ad habentem. Secundum se quidem misericordia maxima est. Pertinet enim ad misericordiam quod alii effundat; et, quod plus est, quod defectus aliorum sublevet; et hoc est maxime superioris. Unde et misereri ponitur proprium Deo, et in hoc maxime dicitur eius omnipotentia manifestari,” cited in *Ego Sapientia* 22; *La Sagesse*, 70.

It is because the superior (the Most High) has all the riches of being and infinite joy in Himself that He gives a share of His riches to creatures and that giving of His wealth manifests His power the most.

2. Mercy is the First Root of God's External Acts

The first step of De Koninck's argument, as laid out above, is to establish the principle that mercy is the root of everything God does externally. "Mercy, having the meaning of absolute universal root, extends from one end of the universe to the other."¹⁰

De Koninck calls mercy the "universal root" because it is the beginning of *everything* God does for creatures. God always wills His own goodness therefore God's goodness is the final cause of all that God does.¹¹ But all the acts by which God shares His goodness with creatures are mercy including that act by which God chooses to share His goodness at all with creatures. God could love His own goodness eternally without ever creating. Mercy is the name we give to God's effective desire to share His riches with creatures. God freely chooses to give to the needy. But mercy is, as we saw in St Thomas's broadest definition, "the removal of any kind of deficiency."¹²

We must go back to the primary motive and to the universal way of God's communication without—*ad extra*. But this motive is nothing other than the divine goodness insofar as it is diffusive of itself. The root of the primary way of this diffusing and of this manifestation outside is mercy. *All the ways of the Lord are mercy and truth.* (Ps 24:10)... That is why St. Bernard calls the mercy of God *causalissima causarum*—of causes the one that is most cause.¹³ Mercy is the first root, even of justice.¹⁴

¹⁰ *Ego Sapientia*, 22. "Ayant raison de racine absolument universelle, la miséricorde s'étend d'un bout à l'autre de l'univers" (*La Sagesse*, 69).

¹¹ *ST I* 19.2.

¹² *ST I* 21.4: "remotione cuiuscumque defectus."

¹³ St. Bernard, *In antiphonam Salve Regina*, sermo 1, n.3 (t.7, p. 43a).

¹⁴ *Ego Sapientia*, 21. "il nous faudra remonter au motif premier et à la voie universelle de la communication de Dieu *au dehors-ad extra*. Or, ce motif n'est autre que la bonté divine en tant qu'elle est diffusive de soi. La racine et la voie première de cette diffusion et de cette manifestation au dehors, c'est la miséricorde: *Universae viae Domini misericordia et veritas - Toutes les voies du Seigneur sont miséricorde et vérité*. C'est pourquoi saint Bernard appelle la miséricorde de Dieu 'causalissima causarum' -la plus cause des causes. La miséricorde est racine première, même de la justice" (*La Sagesse*, 67-68).

Mercy is the primary motive or ultimate end of all that God does outside Himself. As I have said, mercy is the connection between gift-of-self within the Trinity and outside toward creation. It is because God's goodness is diffusive of itself in the Trinitarian processions that He diffuses His goodness outside to creatures. "What is prior must be the cause of the later terms."¹⁵ God is true to His nature of Goodness in His voluntary acts as in His necessary and natural acts. Mercy adds the note of neediness or inferiority to the recipient, which is not present in the processions, since the diffusion of goodness could not proceed outside the divine essence except under the mode of mercy to an inferior.

De Koninck alludes to the metaphysical principle "Goodness is diffusive of itself" that St. Thomas mentions in many places such as in Question 2, article 19 of the *Prima Pars*, which asks, "Whether God wills things apart from Himself?"

God wills not only Himself, but also things other than Himself. This appears from the comparison [to natural things] made earlier. For a natural thing not only has a natural inclination towards its proper good, so that it should acquire it when it does not have it, or so that it should rest in it when it does have it; but also so that it should diffuse it toward others so far as it is possible. Thus we see that every agent, inasmuch as it is in act and perfect, makes its like. Thus this also belongs to the notion of will, that whatever good it has it should communicate to others as far as it is possible. And this applies especially to the divine will, from which every perfection is derived through some likeness. Hence, if natural things, insofar as they are perfect, communicate their good to others, so much more does it apply to the divine will that it should communicate its good to others through a likeness. Therefore He wills both Himself to exist and others to exist; but Himself as the end and other things for the sake of the end inasmuch as it is fitting to the divine goodness that others should partake in it.¹⁶

St. Thomas says that natural things not only have a natural desire to acquire and rest in their own good, but also "to spread their own good to others as much as that is possible."¹⁷ Therefore, he concludes, it is fitting for God, who is most perfect, to spread His goodness to others as much as

¹⁵ Aristotle, *Metaphysics* II, 2 (994a.12).

¹⁶ *ST I* 19.2: "Deus non solum se vult, sed etiam alia a se. Quod apparet a simili prius introducto. Res enim naturalis non solum habet naturalem inclinationem respectu proprii boni, ut acquirat ipsum cum non habet, vel ut quiescat in illo cum habet; sed etiam ut proprium bonum in alia diffundat, secundum quod possibile est. Unde videmus quod omne agens, inquantum est actu et perfectum, facit sibi simile. Unde et hoc pertinet ad rationem voluntatis, ut bonum quod quis habet, aliis communicet, secundum quod possibile est. Et hoc praecipue pertinet ad voluntatem divinam, a qua, per quandam similitudinem, derivatur omnis perfectio. Unde, si res naturales, inquantum perfectae sunt, suum bonum aliis communicant, multo magis pertinet ad voluntatem divinam, ut bonum suum aliis per similitudinem communicet, secundum quod possibile est. Sic igitur vult et se esse, et alia. Sed se ut finem, alia vero ut ad finem, inquantum condecet divinam bonitatem etiam alia ipsam participare."

¹⁷ *ST I* 19.2.

possible. God always loves the goodness of His existence, which is to will Himself to be. By that same act of will, He also wills creatures other than Himself (*alia a se*) to be. God wills creatures to exist so that they can partake in His goodness. We call this diffusion of goodness to creatures, which is by choice rather than by a necessary and natural effusion “mercy,” since it is an action of the superior to remedy a deficiency of the inferior.¹⁸

De Koninck says that all that God does is for the sake of manifesting His glory by way of mercy and justice, citing Psalm 24: *All the ways of the Lord are mercy and truth* (Ps 24:10).¹⁹ “Even the sovereign dignity of the Incarnation” De Koninck writes, “is willed only with a view to the manifestation of the divine glory by way of mercy and justice.”²⁰

The Creation, Incarnation, and Redemption are all willed for the sake of manifesting God’s glory, by way of mercy and justice. Mercy, however, is the root even of justice so it is the ultimate root of everything in cosmic and salvation history.

God is just because He always treats His creatures in a way that is due or fitting to them and to His wisdom and goodness. Creation itself is a work of justice since God creates in accordance

¹⁸ According to St. Thomas, goodness and mercy are both the communication of perfection. Goodness, however, is wider than mercy. St. Thomas sees three differences between goodness and mercy. First, goodness looks at the communication from the point of view of the donor. Goodness is diffusive of itself. Mercy looks at communication from the point of view of the recipient; mercy is the removal of a defect. Thus the divine processions are a communication of goodness but are not mercy. Second, mercy is said most properly of communication to one who is miserable, i.e. to a rational creature, whereas goodness is said of any communication. Third, mercy is voluntary and gratuitous; it is the non-necessary communication of an unmerited benefit; it is an act of goodness but not of mercy to pay a debt. The Trinitarian communications of goodness in the processions are necessary, not merciful. Fourth, in mercy, the donor associates himself in some way with the misery of the recipient; he assimilates himself to him by feeling his misery with him and then acts to take it away.

St. Thomas’s most general definition of mercy, the gratuitous removal of defect, takes only two of the elements into consideration. Nevertheless, it suffices to distinguish goodness from mercy and to show in what way it is appropriate to say that mercy is the root of every act of God *ad extra*. Mercy emphasizes the aspect of neediness in the creature as well as the gratuity, the completely unnecessary and undeserved character of the gift. Although rectifying misery is not part of this definition; it is an important aspect of God’s acts towards men; His gifts take away our misery and make us happy. *Scriptum super Sententiis* IV dist. 46 2.1 qua.2.

¹⁹ *Ego Sapientia*, 21.

²⁰ *Ego Sapientia*, 22. “Même la souveraine dignité de l’Incarnation n’est voulue qu’en vue de la manifestation de la gloire divine par voie de miséricorde et de justice” (*La Sagesse*, 69).

with His wisdom. But “mercy is the first root, even of justice.”²¹ De Koninck cites a text from St.

Thomas on this point:

Now the work of divine justice always presupposes the work of mercy and is grounded in it. Nothing is owed to the creature save because of something preexisting in him, or pre-considered in him: again, if it is owed to the creature, this will be because of something prior. And since we cannot be involved in an infinite regress, we must come to something which depends solely on the goodness of the divine will, which is the ultimate end. For example, it is as if we should say that to have a hand is owed to man because of his rational soul; and to have a rational soul, in order that he be man; and he is a man because of the divine goodness. So it is that mercy shows up in any work of God, as its first root.²²

Mercy is the root of every external activity of God, because every act toward creatures begins with creation, which De Koninck follows St. Thomas in calling *mercy*, even though it is a gift to someone or something that does not yet exist since “not to exist” is to be preeminently needy.

Likewise mercy can be said according as any deficiency whatever is taken away; and thus in the work of creation there is mercy: because God, by creating, removes the greatest deficiency, namely not to be; and this he does out of a willing favor, not constrained by any debt.²³

There can be no act of justice until the most basic gift of all is given, existence. Justice follows mercy, because justice is giving to each its due, but nothing can be owed anything until it exists. Thus existence itself is purely the gift of mercy; nothing can earn its existence. When God creates, He takes away the deficiency of not being by the completely undeserved gift of existence.

As the first cause of every act of God toward creatures, mercy is also the most powerful cause; mercy operates more strongly to produce every effect of God than any other cause. Again De Koninck cites St. Thomas. “So it is that mercy shows up in any work of God... And its power is preserved in everything consequent upon it, and even operates more strongly in it, as the

²¹ *Ego Sapientia*, 21. “La miséricorde est racine première, même de la justice” (*La Sagesse*, 68).

²² *ST I* 21.4: Opus autem divinae iustitiae semper praesupponit opus misericordiae, et in eo fundatur. Creaturae enim non debetur aliquid, nisi propter aliquid in eo praeexistens, vel praeconsideratum, et rursus, si illud creaturae debetur, hoc erit propter aliquid prius. Et cum non sit procedere in infinitum, oportet devenire ad aliquid quod ex sola bonitate divinae voluntatis dependeat, quae est ultimus finis. Utpote si dicamus quod habere manus debitum est homini propter animam rationalem; animam vero rationalem habere, ad hoc quod sit homo; hominem vero esse, propter divinam bonitatem. Et sic in quolibet opere Dei apparet misericordia, quantum ad primam radicem eius;” cited in *Ego Sapientia*, 21-22; *La Sagesse*, 68-69.

²³ *Scriptum super Sententiis* IV, 46 q.2 a.2 qc. 2 ad 1: Similiter et misericordia dupliciter dicitur. Uno modo secundum quod repellit miseriam praecedentem non ex debito; et sic non potest esse misericordia in opere creationis: alio modo communiter, secundum quod sine debito tollitur quicumque defectus; et sic in opere creationis est misericordia: quia maximum defectum Deus creando removet, scilicet non esse; et hoc ex gratuita voluntate fecit, non aliquo debito constrictus.

primary cause flows in more powerfully than the second cause.”²⁴ The first cause in an ordered series of causes is not distant from the effect, standing at the beginning of a long chain of causes in which the cause most proximate to the effect is most truly and directly cause. The first cause’s operation is the most powerful cause of every effect in a series. Mercy is like the decision to buy bread. That decision is the root of looking for the keys, getting in the car, turning on the engine, driving down the street etc. Similarly God’s mercy is always the most powerful cause of all that He does in creation and redemption. God died for us out of justice, so that our debt for sin might be paid, but even more so out of His mercy, which wishes to take away our misery.

Not only is mercy the cause of every act of God towards creatures, but it is also the cause of the disproportionate goodness of these acts. St. Thomas says, “Because of this [power of mercy], even in those things that are owed to creatures, God, out of the abundance of His mercy, gives more generously to creatures than is proportionate to their needs.”²⁵ One might even say that there is a kind of *foolishness* or *extravagance* to mercy that pays the last workers the same as the first (Mt 20:1-16).

3. The Measure of Mercy

The second point De Koninck elaborates is that there are many degrees of divine mercy; the owner of the vineyard shows different degrees of mercy to the workers who are hired at different hours. Mercy is the greatest when it lifts up what is lowest to the highest degree.

If mercy is fulfilled in the elevation of the inferior, this elevation will be the more merciful and revealing of the divine goodness and omnipotence when it raises up that which is most inferior. In other words, we can judge the measure in which God has willed to manifest Himself by the degree of merciful raising up that He has chosen to realize.²⁶

²⁴ ST I 21.4: “Et sic in quolibet opere Dei apparet misericordia, quantum ad primam radicem eius. Cuius virtus salvatur in omnibus consequentibus; et etiam vehementius in eis operatur, sicut causa primaria vehementius influit quam causa secunda.” cited in *Ego Sapientia*, 21-22; La Sagesse, 69.

²⁵ ST I 21.4: “Et propter hoc [cuius virtus] etiam ea quae alicui creaturae debentur, Deus, ex abundantia suae bonitatis, largius dispensat quam exigit proportio rei.”

²⁶ *Ego Sapientia*, 23. “Si la miséricorde s'accomplit dans l'élévation de l'inférieur, cette élévation sera d'autant plus miséricordieuse et manifestative de la bonté et de la toute-puissance divines qu'elle élèvera

But this lifting up requires some kind of bending down. Thus there are two sides to an act of mercy: the cause, or the bending down of the superior and the effect or the lifting up of the inferior. Accordingly, De Koninck distinguishes degrees of mercy according to two relatively independent, but closely connected criteria: one of them from the perspective of the effect of mercy, the other from the disposition of the cause. Mercy is greater when the effect of raising is greater, when the depth from which the inferior is raised and the height to which he or she is raised are greater. Mercy is also greater when the superior stoops down more deeply and identifies himself more fully with the deficiency of the inferior. It reaches its fullest intensity when the superior bears the misery of the inferior for the inferior's sake. "The merciful one takes on himself the misery of another as if he made it his own."²⁷

4. Mercy in Creation and the Supernatural End

Next, De Koninck looks at the lowliness of human nature and the final end to which humans are called.

A. The Lowliness of Human Nature

First, De Koninck ponders the lowliness of human nature. De Koninck considers how inferior humans are from even the lowest pure spirit. Our essences include privation; they "entail so to speak their own negation."²⁸ Each individual is composed of matter as well as form, and that matter is potentially every other cosmic form; hence humans die. The genus only survives by generation of new humans. We are diffused in time and place. Our yesterday is already gone; our tomorrow may never come. Last year we lived in one place; this year we live in another. "Our

davantage ce qui est le plus inférieur. En d'autres termes, nous pouvons juger la mesure dans laquelle Dieu a voulu se manifester, par le degré d'élévation miséricordieuse qu'il a choisi de réaliser" (*La Sagesse*, 72).

²⁷ *Ego Sapientia*, 34, paraphrasing *ST II-II* 30.2: "Aliquis de miseria aliena tristatur aut dolet inquantum miseriam alienam apprehendit ut suam." "Le miséricordieux prend sur soi la misère d'autrui comme si elle était la sienne propre" (*La Sagesse*, 106).

²⁸ *Ego Sapientia*, 24. "entraînent pour ainsi dire leur propre négation" (*La Sagesse*, 75-76).

days and our places are uncertain. Everything here below is variable and decrepit... Our substance is truly at the confines of being.”²⁹

Even our intelligence is “in pure potency, similar to prime matter, a blank slate, a non-intuitive intelligence that can only be awakened to its proper act by means of a sensible singular.”³⁰ We need to sense other bodies in order to slowly come to know anything and even that knowledge comes with difficulty with a strong mixture of error.

Moreover, Man is subject to the contrariety between his sensible and intellectual nature. “Most men follow inclination to the sensible good and allow themselves to be led by it against the order of reason.”³¹ Men tend to overindulge in sensible goods; few achieve moral virtue or wisdom and that only with grace and great effort.

B. The Height of Man’s Final End

Yet, God chooses to lift humans up to a supernatural union with Him in the beatific vision instead of leaving them to enjoy only the natural goods of human life such as health, friendship and natural knowledge of God.

De Koninck comments on the supernatural gift after citing a text from St. Augustine on the natural goods of man.

“Who has not received this mercy from God,” asks St. Augustine, “first, to exist, to be set apart from the brute animals, to be a rational animal that can know God and further, to enjoy this light, this air, the rain, fruits, the seasons, the charms of the earth, health of body, the affection of friends, and the welfare of his home?”³²

Nonetheless, out of pure liberality, God has chosen to manifest Himself in a manner incomparably more profound by elevating the created intelligence to an end which surpasses infinitely the active nature of this intelligence, to a supernatural life, which has for its term the vision of God as He is

²⁹ *Ego Sapientia*, 24. “Nos jours et nos lieux sont incertains. Tout ici-bas est variable et caduc... Notre substance est vraiment aux confins de l’être” (*La Sagesse*, 76).

³⁰ *Ego Sapientia*, 25. “en pure puissance, semblable à la matière première, tabula rasa, intelligence non-intuitive qui ne pourra s’éveiller à son acte propre qu’au moyen du singulier sensible, intelligible en puissance seulement” (*La Sagesse*, 78).

³¹ *Ego Sapientia*, 25. “La plupart des hommes suivent l’inclination vers le bien sensible et se laissent conduire par lui contre l’ordre de la raison.” (*La Sagesse*, 80).

³² St. Augustine, *In Ps 35*, verse 6 (t. 5, col. 346).

in Himself.³³

De Koninck contrasts the natural gifts of God that Augustine mentions with the beatific vision. He says that God chooses to communicate or give Himself to humans to an infinitely greater degree than by such natural goods as friends and family and home. He lifts up humans to become partakers of the divine nature so that they can see Him face to face. It is liberal because He receives nothing for Himself by giving Himself; it is merciful because it is giving what is most precious, God, to those who are poor, humans.

“But the ways in which God can realize this return to Himself under the very note of His deity are still many, some more profound and revealing of His mercy than others.”³⁴ God chooses to elevate us to our supernatural end by the most merciful method possible, by the Incarnation and death of His Son.

5. Mercy in the Incarnation

De Koninck describes how God fulfills the characteristics of mercy in the Incarnation; He lifts up what is of low degree, human nature, to the highest degree, divinity. “This same Son arises from two extremes of the universe, reuniting our baseness with His supreme grandeur.”³⁵ But what is elevation to divinity for human nature is at the same time descent to humanity for God. Each point about the Incarnation can show either a deeper stooping of God towards man or a greater elevation of man towards God.

³³ *Ego Sapientia*, 26. “‘Quel est celui qui n'a pas reçu cette miséricorde de Dieu,’ dit saint Augustin, ‘d'abord pour exister, pour être mis à part des brutes, pour être un animal raisonnable qui peut connaître Dieu, et, ensuite, pour jouir de cette lumière, de cet air, de la pluie, des fruits, des saisons, des charmes de la terre, de la santé du corps, de l'affection des amis, ou du bien-être de sa maison?’

Néanmoins, dans sa pure libéralité, Dieu a choisi de se manifester d'une manière incomparablement plus profonde en élevant l'intelligence créée à une fin qui surpasse infiniment la nature active de cette intelligence, à la vie surnaturelle, qui a pour terme la vision de Dieu tel qu'il est en lui-même” (*La Sagesse*, 81-82).

³⁴ *Ego Sapientia*, 26. “Mais les voies par lesquelles Dieu peut réaliser ce retour à lui sous la raison même de sa déité, sont encore multiples, les unes plus profondes et plus manifestatives de sa miséricorde que les autres” (*La Sagesse*, 82).

³⁵ *Ego Sapientia*, 27. “Ce même Fils surgit aux deux extrémités de l'univers, réunissant notre bassesse avec sa suprême grandeur” (*La Sagesse*, 85).

In Chapters 19-30 of *Ego Sapientia*, De Koninck describes how God always exercises a more profound degree of mercy on humanity's behalf either in giving more than what is proportionate to man's needs or in bending down lower in the manner in which He chooses to give. Since *Ego Sapientia* is a book on Mary, he principally writes about the lowliness and elevation of Mary. However, in doing so, he also writes about the "descending"³⁶ of God into human nature in order to elevate it. All that De Koninck says about the lowliness of the nature that Mary possesses is true of the nature God assumes; the depth to which God stoops is the depth of the human nature that He raises up. I will gather De Koninck's points about the mercy shown in the Incarnation to see how in every case God chooses the more merciful method to elevate humanity.

The sixth chapter will show how the degrees of mercy in *evolution* line up with the degrees of mercy in the *Incarnation*. Evolution deepens both the abasement and the elevation in creation and the Incarnation. It makes God stoop lower in becoming man and it lifts up what is even lower than man to become the body of God.

Let us look at five ways that God chose a more merciful method in elevating humanity in the Incarnation.

A. The Hypostatic Union to a Created Nature

God could have given us the supernatural gift immediately as He did to the angels. Instead, De Koninck tells us, God chose to accomplish this elevation "in a much more striking manner"³⁷ by the "visible sending of a divine person in hypostatic union with a created nature."³⁸ God chose to give us beatitude through humbling Himself by assuming a limited created nature. "For God so loved the world that he gave his only-begotten Son, that whoever believes in him should not perish but have eternal life" (Jn. 3:16).

Descending thus into His creation in order to elevate it from within to the properly divine order,

³⁶ *Ego Sapientia*, 26, "descendant" (*La Sagesse*, 83).

³⁷ *Ego Sapientia*, 26. "d'une manière beaucoup plus éclatante" (*La Sagesse*, 83).

³⁸ *Ego Sapientia*, 26. "la mission visible d'une personne divine grâce à l'union hypostatique à une nature créée" (*La Sagesse*, 83).

God would already manifest the mercy of His omnipotence in an infinitely greater measure than in the creation alone of intellectual creatures so perfect in themselves or in their immediate elevation [like in the angels].³⁹

De Koninck calls this entering into creation a *descent* because God the Son, who contains the fullness of being, assumes what is limited and empty, a created nature, in the unity of His person. “Have this mind among yourselves, which was in Christ Jesus, who, though he was in the form of God, did not count equality with God a thing to be grasped, but emptied himself, taking the form of a servant”⁴⁰ (Phil 2:5-6). This descent reveals His mercy more than creation because it is a greater bending down of the Most High into His creation; He not only goes forth in producing the being of rational creatures, dwelling in them by His sustaining power and providential rule, but also goes forth to become one of them assuming the limited nature into His person.

This descent for God is ascent for man. In the Incarnation, a creature and therefore what is infinitely distant from God becomes God. An intellectual creature is not only divinized and united to God in the beatific vision; the Son assumes him into the unity of the divine person. A creature is lifted up to be God in the awe-inspiring means that God chooses to redeem us.

B. The Assumption of Human Nature

Even this union could have entailed a lesser abasement; God could have assumed an angelic nature instead of a human nature. But it was to this lowly nature not to one of the angels “who are always in act, immutable, and incapable of error or fault in the natural order” that God chose to join Himself. Wouldn’t it have been more fitting for God, the omnipotent Supreme Being, to assume a pure angelic nature since it is the most perfect created nature rather than the lowest of all intellectual natures? An emphatic negative is De Koninck’s answer.

This same hypostatic union can in turn be accomplished in different ways, one more merciful than the other, and consequently more profound, insofar as what is elevated is lower...[It] can be accomplished in a more admirable manner in the assumption of the lower nature that is human

³⁹ *Ego Sapientia*, 26. “Descendant ainsi dans sa création pour l’élever du dedans à l’ordre proprement divin, Dieu manifesterait déjà la miséricorde de sa toute-puissance dans une mesure infiniment plus profonde que dans la seule création d’êtres intellectuels si parfaits soient-ils; ou dans leur élévation immédiate” (*La Sagesse*, 83).

⁴⁰ Cited by De Koninck, *Ego Sapientia*, 34.

nature the least worthy of all intellectual natures. The divine wisdom and power confounds the most powerful spirits.⁴¹

What is most fitting to God is not what shows the most grandeur and majesty but what shows the most mercy. Therefore, although angels are pure spirits, much closer to God in their intelligence and immutability than weak humanity, it is man's poverty that makes his nature the most fitting of all intellectual natures for God to assume, because the Incarnation thereby displays God's mercy more profoundly. De Koninck speaks of the elevation of a lower nature as being more merciful (human rather than angelic); but this elevation is at the same time a deeper descent of God (assuming a nature that is lower). De Koninck cites Cornelius a Lapide, "She knew that her son was going to restore the world at the price of His great humility, and that He had to *abase* His deity to the point of taking on human flesh."⁴²

This abasement was the greater; because it was not the highest intellectual creature that God became, but the absolute lowest, a human being. "Even the lowest pure spirit constitutes by himself a universe incommensurably more perfect than the cosmos and humanity combined."⁴³ The Absolute Being assumed a nature much closer to nothingness. Indeed, the Son could not become a lower nature than human, such as plant or beast; since neither has a rational soul, they could not be the conjoined instrument of a person. God could not speak or teach or make friends as a plant or beast, but inferior and bodily as men are, they are rational and thus capable of wisdom and love. The divine Word can speak through the words of the man Jesus Christ; He can love with a human heart. The elevation to divinity was greater in the Incarnation than if it were an

⁴¹ *Ego Sapientia*, 26-27. "Cette même union hypostatique peut à son tour s'accomplir de diverses manières, l'une étant plus miséricordieuse que l'autre, et par conséquent plus profonde, selon qu'elle élève davantage l'inférieur... peut se réaliser d'une manière plus admirable dans l'assomption de la nature inférieure qu'est la nature humaine, la moins digne de toutes les natures intellectuelles. La sagesse et la puissance divines confondent les esprits les plus puissants" (*La Sagesse*, 83-84).

⁴² Cornelius a Lapide, *In Proverbia Solomonis*, 8:13, p. 210a; cited by De Koninck, *Ego Sapientia*, 36. "Elle savait... que son Fils devait restaurer le monde au prix de la plus grande humilité, et qu'il devait abaisser sa déité jus- qu'à prendre une chair mortelle" (*La Sagesse*, 112).

⁴³ *Ego Sapientia*, 23. "Même l'esprit pur le plus inférieur constitue à lui seul un univers incommensurablement plus parfait que le cosmos et l'humanité tout ensemble" (*La Sagesse*, 75).

angelic nature because it was the assumption of the lowest possible creature in the hierarchy of being.

C. Possible Human Nature

The humiliation of the Incarnation involves even more abasement and thus more mercy. Christ assumed not just the lowest possible intellectual nature, but a fallen human nature, liable to suffering and death.

Mercy is manifested even beyond the assumption alone of human nature by way of birth... By original sin, this human nature became liable to suffering. We were born into a state of misery properly speaking.⁴⁴

The Son assumed a wounded nature predisposed to every sort of suffering including thirst, hunger, tiredness, physical pain and even death. “He became like us in all things but sin,” including all the miseries that sin brings down upon us. De Koninck says, following St. Thomas closely in this passage, that the Son assumed fallen human nature to be more merciful to us. Someone who is merciful, De Koninck writes, “takes on himself the misery of another as if he made it his own.”⁴⁵ This can be done in two ways: by “affective union,” or by a “real union.”⁴⁶ In an “affective union,” we suffer in sympathy with the pain of the pitied one as though it were our own pain. When a friend suffers a tragic loss from the death of a spouse or child, we suffer with

⁴⁴ *Ego Sapientia*, 33. “La miséricorde s’est manifestée même au-delà de la seule assumption de la nature humaine par voie de naissance... Par le péché originel, cette nature humaine est devenue passible. Nous naissons dans un état de misère proprement dite” (*La Sagesse*, 103).

⁴⁵ *Ego Sapientia*, 34. “Prend sur soi la misère d’autrui comme si elle était la sienne propre” (*La Sagesse*, 106). De Koninck is closely following the doctrine of St. Thomas. *ST* II-II 30.2: “Cum misericordia sit compassio super miseria aliena, ut dictum est, ex hoc contingit quod aliquis misereatur ex quo contingit quod de miseria aliena doleat. Quia autem tristitia seu dolor est de proprio malo, intantum aliquis de miseria aliena tristatur aut dolet inquantum miseriam alienam apprehendit ut suam. Hoc autem contingit dupliciter. Uno modo, secundum unionem affectus, quod fit per amorem. Quia enim amans reputat amicum tanquam seipsum, malum ipsius reputat tanquam suum malum, et ideo dolet de malo amici sicut de suo. Et inde est quod philosophus, in IX Ethic., inter alia amabilia ponit hoc quod est condolare amico. Et apostolus dicit, ad Rom. XII, gaudere cum gaudentibus, flere cum flentibus. Alio modo contingit secundum unionem realem, utpote cum malum aliquorum propinquum est ut ab eis ad nos transeat. Et ideo philosophus dicit, in II Rhet., homines miserentur super illos qui sunt eis coniuncti et similes, quia per hoc fit eis aestimatio quod ipsi etiam possint similia pati. Et inde est etiam quod senes et sapientes, qui considerant se posse in mala incidere, et debiles et formidolosi magis sunt misericordes. E contrario autem alii, qui reputant se esse felices et intantum potentes quod nihil mali putant se posse pati, non ita miserentur. Sic igitur semper defectus est ratio miserendi, vel inquantum aliquis defectum alicuius reputat suum, propter unionem amoris; vel propter possibilitatem similia patiendi.”

⁴⁶ *Ego Sapientia*, 34. “une union d’affection”; “une union réelle” (*La Sagesse*, 106).

our friend without actually losing our wife or child. Since we, too, love our spouse and our child and are aware that, because of our fragility, we could also lose them at any moment, we feel some of the same sorrow in our heart that we would feel if we were indeed undergoing the same loss. The more we love our friend, the more closely we identify his or her loss with our own and the more we suffer.

In a “real union” we choose to suffer the very same pain in our body as the pitied one. For example, St. Damian chose a real union with the lepers of Molokai; he chose to suffer the same island isolation, meager diet, diseased and criminal company, and finally the leprosy itself of those whom he pitied. He wrote to his brother, “I make myself a leper with the lepers to gain all to Jesus Christ. That is why, in preaching, I say ‘we lepers’ not ‘my brethren.’”⁴⁷ When he discovered he had contracted leprosy, he wrote to his Superior, “I am a leper. Blessed be the good God!”⁴⁸

But that [real union] presupposes a proximity, a similitude of nature such that it permits one thus to take on, in a physical manner, the misery of another. In this way a real union in misery is accomplished. But God has assumed human nature along with its passibility, thus taking on our misery in the manner that it affects us, that is, physically assuming evil (*malum poenae*) in this way---a darkness far more profound than any that comes from our nature, the most profound that God could assume.⁴⁹

St. Damien could choose to suffer with the lepers because he was a man like them. He could take a boat to their island and live in a hut like theirs; he could suffer from hunger and cold; he had a body like theirs that could contract their disease of leprosy and die.

⁴⁷ Blessed Damien Molokai, Letter to his brother in 1873, Catholic Dictionary-Damien Father (Apostle of Lepers) dictionary.editme.com/Damien.

⁴⁸ Blessed Damien Molokai, Letter to his superior, October 1885, Catholic Dictionary-Damien Father (Apostle of Lepers) dictionary.editme.com/Damien.

⁴⁹ *Ego Sapientia*, 34. “Mais cela même suppose une proximité, une similitude de nature telle, qu'elle permette de prendre ainsi sur soi, d'une manière physique, la misère d'autrui. Il s'accomplit de cette manière une union réelle dans la misère. Or, Dieu a assumé la nature humaine avec sa passibilité, prenant ainsi sur soi notre misère de la manière dont elle nous affecte, c'est-à-dire physiquement; assumant par là le mal (*malum poenae*)-une noirceur infiniment plus profonde que celle qui nous revenait par nature: la plus profonde que Dieu pouvait assumer” (*La Sagesse*, 107).

God, however, cannot even suffer by an “affective union” with us in His divine nature; there is no emotional suffering in God. Much less could He suffer by a “real union” since He has no body that could suffer bodily harm or death. How could the Author of Life die?

In fact, mercy is manifested even beyond the assumption alone of human nature by way of birth. Man, whom God had established in a state of original justice infinitely higher than what would have been befitting by nature, succumbed to the temptation to be himself the origin of the dignity to which God had deigned to raise him...By original sin, this human nature became liable to suffering. We were born into a state of misery properly speaking,⁵⁰

The Son has assumed our fallen nature in “a state of misery properly speaking” in order to suffer all that we suffer. “The merciful one takes on himself the misery of another as if he made it his own.”⁵¹ God took our misery in both of the ways De Koninck described, by an “affective union” and a ‘real union.’⁵² De Koninck speaks immediately of Christ’s real union with us in misery, but I will pause first to consider His affective union with us.

God has mercy on us first by an “affective union;” He sympathizes with our pain by His Sacred Heart, a human heart that becomes the instrument for His divinity. It enables Him to feel the sorrow for us that He could not feel in His divinity. Jesus cried over the fate of Jerusalem; He wept at Lazarus’s death. He had pity on the crowd because they were like sheep without a shepherd.

The assumed human nature also allows him to suffer by a “real union.” He bears our sufferings in His own body and soul. He can choose to suffer tiredness, hunger, thirst, scourging, and even death because He now has a body like ours that can suffer and die. Since humans are the only intellectual beings that are bodies only humans can suffer physically and die. If God had assumed an angelic nature He could not have suffered physical pain and died for us. Again, it is

⁵⁰ *Ego Sapientia*, 33. “En fait, la miséricorde s’est manifestée même au-delà de la seule assomption de la nature humaine par voie de naissance. L’homme, que Dieu avait établi dans l’état de justice originelle infiniment supérieur à tout ce qui lui peut convenir par nature, avait succombé à la tentation d’être lui-même l’origine de la dignité à laquelle Dieu daigna l’élever... Par le péché originel, cette nature humaine est devenue passible. Nous naissons dans un état de misère proprement dite” (*La Sagesse*, 103).

⁵¹ *Ego Sapientia*, 34. “Le miséricordieux prend sur soi la misère d’autrui comme si elle était la sienne propre” (*La Sagesse*, 106).

⁵² *Ego Sapientia*, 34. “une union d’affection”; “une union réelle” (*La Sagesse*, 106).

man's poverty that allows God to show more mercy to him than to the angels; God can stoop lower by taking on a passible human nature.

It is not a perfect prelapsarian human that is lifted up to become God; rather it is a man who gets hungry, tired, and sad. The Son assumed a nature that can suffer and does suffer all the pain that a man can bear. The elevation to divinity was greater because it was of a nature that was lower, wounded by the effects of original sin.

D. Sinful ancestors

The Son not only takes on our fallen nature, but also chooses as his legal father a man who was the descendent of notorious sinners, like Judah and Tamar as well as David and Bathsheba. Moreover, Joseph's ancestor Perez was generated by an act of adultery. Is it not unfitting for God to be the legal son of sinners, even a son of one begotten in sin like Perez? On the contrary, it is fitting because it is more humble and therefore more merciful.

Moreover, although Mary herself was sinless, she was most certainly the descendent of sinners from our first parents, Adam and Eve, down to her parents. "Death spread to all men because all men sinned" (Rom 5:12). God chooses to descend from sinful ancestors in the flesh. He makes Himself dependent for His human origin on sinners.

De Koninck writes about Jesus's sinful ancestors in the genealogies in the gospels. He cites the *Mariale*, attributed to St. Albert, on their purpose in being included.⁵³ The genealogy mentions sinful ancestors primarily, De Koninck says, "in order that the wisdom of God might appear more merciful...There is a fourth way [of origination] as well, by which good comes from

⁵³ Although De Koninck refers to the work as St. Albert's *Mariale*, most scholars today do not believe that Albert wrote it. They refer to the author as Psuedo-Albert. Irvn M Resnick gives a brief summary of the question in "PS.-Albert the Great on the Physiognomy of Jesus and Mary: *Medieval Studies* 64 (2002): 229.

evil, and this is proper to God alone because His wisdom conquers evil and He attains all things in their beginning and their end.”⁵⁴

God can use what is most distant from Him, evil, to bring good out of it for those whom He loves. For example, Scripture speaks of God sending Joseph to Egypt through his brothers’ evil deeds in order to save the lives of the whole tribe from famine. “And now do not be distressed, or angry with yourselves, because you sold me here; for God sent me before you to preserve life.” (Gen 44:5). God alone can cause free acts to occur freely in such a way that even when humans sin, He brings forth a greater good through their sinful actions. Thus God brings forth St. Joseph, our Savior’s legal ancestor, through an adulterous act and he brings forth Mary, doubtless, from many sinful ancestors, even if not from adultery. In this way, He shows His omnipotent mercy, which cannot be defeated by any evil but always brings about a greater good through it.

De Koninck cites St. Albert who speaks of the genealogy of *Our Lady* although both Matthew and Luke give the genealogy of *St. Joseph*. St. Albert may suppose that Mary was also of the house of David and would have the same ancestors from a certain forefather back. This is by no means certain, but to whatever tribe Mary belonged, she was also the descendent of sinners. Therefore the same point may be made about Jesus’s physical ancestors as about His legal ancestors.

Jesus, as the descendant of sinners, is in that respect lower than Adam; therefore elevation to the hypostatic union is greater. Christ is also humbler because, as De Koninck tells us, Christ was pious toward all of his ancestors (not excepting the most sinful). “The filial piety of Christ, of the son of man, son of David, extends as well to his ancestors, to the parents of the Blessed Virgin, to St. Anne and to all the chosen people.”⁵⁵ Likewise Mary, as the descendant of sinners, is lower

⁵⁴ *Ego Sapientia*, 35; quoting the *Mariale*, attributed to Albert: q. 24, p. 53a: “Ut sapientia Dei misericordior appareret...Quartus exitus est, ut de malo bonum, et hoc solius Dei est proprium, cujus sapientia vincit malitiam, attingens a fine usque ad finem”(La Sagesse, 109-110).

⁵⁵ *The Piety of the Son*, 40-41. “La piété filiale du Christ, du Fils de l’homme, fils de David, s’étend aussi à ses ancêtres, aux parents de la sainte Vierge, à sainte Anne, à tout le peuple élu” (*La Piété du Fils*, 27).

than if she were Eve or the descendant of sinless ancestors; therefore her elevation to become the mother of God is greater.

E. Passion and Death

Christ's passion and death are the ultimate divine humiliation and the ultimate revelation of divine mercy. "And being found in human form he humbled himself and became obedient unto death, even death on a cross" (Phil. 2:8). At the death of Jesus the veil to the Holy of Holies was ripped open because the innermost heart of God was revealed (Lk 23:34).

Given the immensity of mercy that the Almighty has chosen to manifest, it is only fitting that the universal royalty of Christ and of His mother was manifested in the Passion. "Pilate then said to him, 'You are a king?' Jesus replied: 'Thou hast said it, I am a king.' " (Jn. 18:37) It is the same Christ who said, "I am a worm and no man, the opprobrium of men and the castoff of the people," and "I am king, king of kings and lord of lords." (Ps. 21:7 and Rev. 19:16). It is in the Passion that shines forth in all its profundity and extent the meaning of "Nigra sum, sed formosa." (Song. 1:5). [I am black but beautiful.]⁵⁶

Christ affirms his kingship in the Passion because, paradoxically, it is there above all that His majesty is revealed. Why would De Koninck say that Christ's majesty is revealed in His crucifixion? Christ is God and therefore King; He is omnipotence, but his power is revealed in His mercy. Jesus is black but beautiful because He is King of Mercy. One of the gospel readings for the feast of Christ the King is the crucifixion passage from Luke. Jesus is black because he is suffering the blackest misery for our sins; at the same time He is beautiful because He is thereby earning our redemption and showing His great love for us. "For God so loved the world that he gave his only-begotten Son" (Jn 3:16).

De Koninck writes that God's reveals His omnipotence the utmost when He suffers evil for us and turns it to our good, because evil is that which is most directly opposed to God. To turn evil to good is to be all-powerful. Only the creator of all being can "rescue" evil from its non-

⁵⁶ *Ego Sapientia*, 29 ; translation modified. "Vu l'immensité de la miséricorde que le Tout-Puissant avait choisi de manifester, il était de toute convenance que la royauté universelle du Christ et de sa mère fût manifestée dans la passion. *Pilate lui dit, alors: Tu es donc roi? Jésus répondit: Tu le dis, je suis roi. C'est le même Christ qui dit: Je suis un ver, et non un homme, l'opprobre des homes et le rebut du peuple, et: Je suis roi, Roi des rois et Seigneur des seigneurs. C'est dans la passion qu'éclate dans toute sa profondeur et toute son étendue le nigra sum, sed formosa*" (*La Sagesse*, 122).

being or even anti-being and opposition to God and use it to cause a recreation of all being in Christ, a new heavens and a new earth. De Koninck explains the divine manifestation of mercy in Christ's death.

Sin is not just any defect: it is that which is at the farthest remove from God. Properly speaking, evil is not a simple privation, it is opposed to the good as a contrary. Consequently, the mercy which will face down evil, which will be victorious over it, will also be, in a sense, the greatest possible. The manifestation of the divine omnipotence will be, here, in the universe itself, like a return on itself: it will be the fullness of mercy. Evil (*malum poenae*) is ordered to the greatest manifestation of mercy that could be conceived. *O felix culpa quae talem ac tantum meruit habere Redemptorem!*—*O happy fault that has won for us such and so great a Redeemer!*⁵⁷

Evil is allowed to exist because of mercy. It is ordered to the greatest possible revelation of God's mercy, the cross. As De Koninck says, God the Son "faces down evil" and conquers it through his gift-of-self on the cross. "I lay down my life for the sheep" (Jn 10:15). This humiliation or abasement "even to death on the cross" is so great that it reveals the infinite mercy of God; it returns the outermost limits of creation, the reign of evil, to God. Thus it reveals the Son's divinity by revealing His immense mercy. "When you have lifted up the Son of man, then you will know that I Am" (Jn 8:28).

De Koninck's insight into the close connection between the death of Christ and His glorification is deeply rooted in the Tradition. In particular, it finds abundant corroboration in the Gospel of John. In Chapter 12, Jesus speaks about his death. "The hour has come for the Son of Man to be glorified. Truly, truly I say to you, unless a grain of wheat falls into the earth and dies, it remains alone; but if it dies, it bears much fruit" (Jn 23-24). The Son of Man will be glorified when He "falls into the earth and dies," but when He is glorified, God is glorified. In chapter 13, Jesus says as Judas goes into the night to betray him, "Now is the Son of man glorified, and in him God is glorified" (John 13:31) God is glorified on the cross because God's mercy is most

⁵⁷ *Ego Sapientia*, 33. "Or, le péché n'est pas un défaut quelconque: il est cela même qui est le plus éloigné de Dieu. Le mal proprement dit n'est pas simple privation, il est opposé au bien comme un contraire. Par conséquent, la miséricorde qui fera face au mal, qui sera victorieuse du mal, sera aussi, en un sens, la plus grande possible. La manifestation de la toute-puissance divine fera, ici, dans l'univers même, comme un retour à soi: elle sera comme la plénitude de la miséricorde. Le mal (*malum poenae*) a été ordonné à la plus grande manifestation de miséricorde qui se puisse concevoir. *O felix culpa, quae talem ac tantum meruit habere Redemptorem!* - *O heureuse faute qui nous a valu un tel et si grand Rédempteur*" (*La Sagesse*, 104).

perfectly revealed on the cross. God, the Most High, dies the lowliest death on earth in order to lift up the lowest rational creature, sinful man, to the highest place, adopted sonship in the Father's House. God manifests His mercy to the end, in an unsurpassable way, by His death. "Jesus...having loved his own who were in the world, he loved them *to the end*" (Jn `13:1).

The elevation of Christ's human nature to sit at the right hand of the Father is greater because it is preceded by the descent into death and Hades. Jesus descends as low as He can in His passion and death. He could have redeemed us by one act of charity; instead He willed to suffer all that a human can suffer except damnation. He can truly say, "Out of the depths, I cry unto you" (Ps 130). From these depths, he is raised to life; He ascends into heaven, and sits in glory at the right hand of the Father. There is a circular motion that begins with the Son's procession from the Father into the world by assuming a human nature, the descent continues into his passion, death, and Hell. Then he rises, ascends into heaven, and completes the circle by taking his place at the right hand of the Father.

To conclude, De Koninck has shown five ways that God has chosen the more merciful manner to communicate Himself in the Incarnation: On the side of the cause, God achieves the effect by stooping down lower to be closer to us: 1) by a hypostatic union with a creature rather than immediately; 2) by assuming a human nature rather than an angelic nature; 3) by assuming a fallen (passible) human nature rather than a perfect human nature; 4) by choosing to be the legal descendent of notorious sinners rather than saints; 5) by choosing to redeem us by His passion and death rather than by any other act of charity. On the side of the effect, there is a corresponding increase of the elevation of humanity; in each case, human nature is raised from a lower point.

In the next section I will look further at mercy in the concrete method of the Incarnation, the procession of the Word in Mary's womb. We will see how the very poverty of the inferior (such as its materiality and receptivity) is used to elevate it higher. De Koninck says, "God has chosen

to realize the *limit* of mercy: He has chosen the things that are not and has exalted the humble.”⁵⁸

We will also see how the Son’s temporal procession is the most powerful imitation and manifestation of His eternal procession from the Father.

6. Mercy in Mary’s Generation of Christ

God’s method of elevating us to beatitude, the Incarnation, is more merciful than the method He uses to elevate the angels, immediate illumination, not only because in it God stoops down lower to reach us and lifts us from a lower point, but because the very method of stooping becomes the utmost elevation of creatures. By the Incarnation, man is not only redeemed so that he can reach his supernatural end and see God, but man becomes God. Furthermore a woman becomes the origin of God. At the same time, because the Incarnation is the continuation into the world of the Son’s procession from the Father, it reveals the inner dynamics of the Trinity.

In the final chapter, I will use these same points about the Incarnation to show how evolution also allows the whole cosmos to both imitate and participate in a more profound way in the temporal procession of the Son. The cosmos becomes the origin of God; the cosmos becomes the body of God, to the extent that it is one body.

Let us look at four ways the temporal procession of the Son is merciful; God chooses to give more than what is necessary:

A. Conception and Birth

God the Son could have assumed an adult human nature immediately instead of by conception and birth from a virgin. Instead, God chose to become a tiny cell in the womb of a young woman and to develop over nine months being nourished and protected by her. God chose to become totally reliant on one of his lowliest creatures, “thus putting Himself in dependence on

⁵⁸ *Ego Sapientia*, 46. “Dieu a choisi de réaliser la limite de la miséricorde: *il a choisi les choses qui ne sont pas: il a exalté les humbles*” (*La Sagesse*, 146).

man and proceeding because of that into the universe itself by way of origination. And the *nature* itself from which He is born becomes in that way properly the origin of God.”⁵⁹

God continues this dependence on humans in His infancy and childhood. Mary and Joseph take care of God for many years until he is an adult. God chooses silence in the womb, submission, and dependence over independence and maturity. “And he went down with them, and came to Nazareth, and was obedient to them” (Lk 2:51). Again God chooses the more merciful way; He becomes lower and lifts humanity from a lower point, from a tiny cell within the womb of Mary rather than from a mature adult.

Further, God chooses to give a woman the greatest grace possible next to the hypostatic union, the grace of being the Mother of God. While it is stooping down for God to put Himself in dependence on a creature, and even to be generated by a creature, it is the greatest possible elevation for a pure creature. God lifts Mary up to be the mother of God. “It would be impossible for a pure creature to be raised any higher. By the grace of her maternity, she exhausts, so to speak, the very possibility of a higher elevation.”⁶⁰

B. Human Poverty

But that is not the end of the inventiveness of God’s mercy. God uses the very weakness of human nature to give it the greatest gift. Although God could have assumed an angelic nature, He could not have assumed it by way of origination since angels are too perfect to generate like humans. Angels have no bodies and therefore no gametes; they are each a separate species so they have no mode of reproduction. Nor are they perfect enough to generate as the Father does; their inner word is not a person. The only created intelligent beings that can reproduce are humans because they are bodies, although they cannot reproduce their spiritual principle. Only

⁵⁹ *Ego Sapientia*, 27; emphasis added. “se mettant ainsi dans la dépendance de l’homme et procédant par là, dans l’univers même, par voie d’origination. Et l’être même d’où il naît devient par là proprement origine de Dieu” (*La Sagesse*, 84).

⁶⁰ *Ego Sapientia*, 11. “Il est impossible qu’une pure créature soit élevée à un degré plus haut. Par sa grâce de maternité, elle épuise pour ainsi dire la possibilité même d’une élévation plus grande” (*La Sagesse*, 39).

God can create the human soul. Thus, in God's mercy, it is the very lowliness of human nature, its corporality that allows its blessedness; only the imperfect being of its matter allows it the glory of becoming the origin of God.

It is then thanks to the potentiality of matter, indeed of matter as deprived of form, and thus to the privation that is the weakest, that the Son of God can proceed from within His creation, thus imitating in the most profound way His generation from the eternal Father. "I am plunged into the mire of the deep, and there is nowhere to set my foot." (Ps 68:3) Happy imperfection of matter that permits such a formation!⁶¹

Mary truly generates God the Son because He proceeds in his human nature from her substance. Presumably, she contributes the ovum from which His body develops after it has been miraculously fertilized by the power of the Holy Spirit. De Koninck sees in the phrase "the mire of the deep" a reference to God being immersed in prime matter by assuming it into His person through His human body.

De Koninck interprets the Church's application to Mary of the sentence from *The Song of Songs* "I am black but beautiful." Mary is *beautiful* because she is the Mother of God, but she can only be mother of God because of her *darkness*, her matter. It is because she is mortal, changeable, and potential that she can bring forth another like herself: mortal, changeable, and potential who is at the same time God. God creates an intellectual being that is so poor, so lacking in being, that it needs to reproduce to keep at least its species alive when it dies. Yet God is so merciful that He uses that poverty to give His only Son to the world. Indeed it is only that poverty that makes it possible for God to proceed from a creature.

C. Born of a Woman

According to De Koninck, God uses poverty to bestow more mercy in a second way; it is a woman not a man who is lifted up to become the generator of God. According to one aspect, De Koninck writes, woman can be regarded as less active than man in the act of reproduction. She

⁶¹ *Ego Sapientia*, 27. "C'est donc grâce à la potentialité de la matière, voire à la matière en tant qu'elle est privée de forme, donc à la privation qui est la réalité la plus débile, que le Fils de Dieu peut procéder du dedans même de sa création, imitant ainsi d'une manière très profonde sa génération du Père éternel. *Infixus sum in limo profundum: et non est substantia - Je suis enfoncé dans la profondeur limoneuse, où il n'y a point d'appui*. Heureuse imperfection de la matière qui permet une telle information!" (*La Sagesse*, 84).

receives the seed into her body, while man gives the seed. While this limited aspect of inferiority is what makes it possible for a woman and not a man to be the generator of God, it also makes the elevation even greater because it is the elevation of what is lower. “Mary is beautiful because of the divine maternity, but on the side of the creature herself, this maternity is possible only thanks to the darkness of potentiality and privation.”⁶² The one who is receptive in the conjugal act, the woman, becomes the origin of Pure Act, the creator of all things and the First Mover. It is the woman’s role of receiving the semen that unites with her ovum, and nourishing the new being within her womb that allows Mary to be the mother of God.⁶³

Note this intimate rapprochement of God that permits maternity in virtue of this very passivity in conception. God could not proceed here below from a principle which is active in fecundation. Such a principle would have to take on the note of a passive principle. It is only the principle which is passive in generation, the principle that has the note of malleable matter, that the fruitfulness of Pure Act can find its echo in an entitative and substantial mode. *Imperfecta perfecte*. Only the woman can have along with God the notion of first principle in the origination of God.”⁶⁴

A man receives nothing in the act of generation, but only gives something. Nor does he carry the child within him. He is therefore unsuitable biologically to be fecundated by the Holy Spirit and bring forth a child. De Koninck explains the difficulty further:

If a man could have been the father of God, not only would generation be less perfect, paternity would be possible only insofar as it would imitate maternity: it is the maternity of the woman, and not the Paternity of God which would be the original of it.⁶⁵

If a man were *per impossibile* to become the origin of God, De Koninck writes, he would have to become like a mother, receiving from God what was necessary to complete his gametes and then be changed biologically to be able to bear a child.

⁶² *Ego Sapientia*, 27. “Marie est belle par la maternité divine; mais, de la part de la créature elle-même, cette maternité n'est possible que grâce à la noirceur de la potentialité et de la privation” (*La Sagesse*, 86).

⁶³ We do not know the details of Christ’s miraculous conception, but presumably Mary provided the ovum, since that is what human mothers do.

⁶⁴ *Ego Sapientia*, 28. “Marquons cet intime rapprochement de Dieu que permet la maternité en vertu même de sa passivité dans la conception. Dieu ne peut procéder ici-bas d'un principe qui est actif dans la fécondation. Ce principe, en effet, devrait lui-même revêtir la raison de principe passif. Ce n'est que dans le principe qui est passif dans la génération, le principe qui a raison de matière malléable, que la fécondité de l'Acte Pur peut trouver son écho selon un mode entitatif et substantiel. 'Imperfecta perfecte'. Seule la femme peut avoir avec Dieu raison de principe premier dans l'origination de Dieu” (*La Sagesse*, 86-87).

⁶⁵ *Ego Sapientia*, 28. “Si l'homme pouvait être père de Dieu, non seulement la génération serait moins parfaite; la paternité ne serait possible qu'en tant qu'elle imiterait la maternité: c'est la maternité de la femme, et non pas la Paternité de Dieu, qui en serait l'original” (*La Sagesse*, 87).

Already in 1943, when De Koninck wrote *Ego Sapientia*, he was aware that words about any kind of inequality of woman with man would be offensive to some people. However, he insists on it because it increases the dignity and beauty of Mary.

One can see in this how much those who would wish man to be by nature at least equal to the angels and the woman in everything the equal of man diminish the true scale that God has deigned to give His work of predilection, where the Woman is Queen of the Angels. It is an injury to the sublime humility of the Handmaid of God.⁶⁶

Mary not only comprehends every facet of her inferiority before God, but also loves it and wishes to contemplate it with joy because it increases God's mercy. "My soul magnifies the Lord, and my spirit rejoices in God my Savior, for he has regarded the low estate of his handmaiden...for he who is mighty has done great things for me." The angels are not capable of such deep humility because their nature is not as base.

Before God Mary recognizes the lowliness of her condition, and it is in this that her act of the virtue of humility consists. She did not see the lowliness in which she found herself as a condition contrary to her dignity, as a humiliation inflicted on her and from which she would have praised the Lord for delivering her. Here is where the act of humility of the Handmaid of the Lord attains the most sublime: it attains to the two extremities of the universe. The angel does not have in himself a substance which would permit so profound an act [of humility] which *extends from one end to the other*. (Ws 8:1)⁶⁷

Mary's act of humility extends from end to end because she grasps both herself in her true condition at the bottom of the universe of persons: the lowest intellectual creature rather than an angel, poor rather than rich, and, according to De Koninck, a woman rather than a man; and she grasps the height: the infinite mercy and omnipotence of God, who chooses to elevate her to become His mother. Thus she completes a kind of circle in her humility uniting herself to God from whom she proceeded as creature.

⁶⁶ *Ego Sapientia*, 46-47. "On voit par là combien tous ceux qui voudraient que l'homme soit par nature au moins l'égal des anges et la femme en tout l'égale de l'homme, diminuent la véritable taille que Dieu a daigné donner à son œuvre de prédilection, où la Femme est Reine des anges. C'est une injure à l'humilité sublime de la Servante de Dieu" (*La Sagesse*, 146).

⁶⁷ *Ego Sapientia*, 29. "Marie reconnaît devant Dieu la bassesse de sa condition, et c'est en cela même que consiste son acte de vertu d'humilité. Elle ne voit pas l'abaissement où elle se trouvait comme un état contraire à sa dignité, comme une humiliation dont on l'avait affligée et dont elle louerait le Seigneur pour l'en avoir libérée. Voilà pourquoi l'acte d'humilité de la Servante du Seigneur atteint au plus sublime: il atteint les deux extrémités de l'univers. L'ange n'a pas en lui la substance qui permettrait un acte aussi profond *qui atteint d'un bout à l'autre*" (*La Sagesse*, 89-90).

D. The Humility of God and the Humility of Mary

De Koninck arrests our attention by speaking of the humiliation of God. “In her perfect humility, founded on a right understanding of the human condition, Mary comprehended the *humiliation* to which God chose to submit Himself.”⁶⁸ De Koninck compares Mary’s humility to the humility of God in imprisoning Himself in the womb of the Virgin in utter helplessness and silence for nine months. God chooses to stoop so low that He, the omnipotent, becomes powerless; He, Wisdom and Word, becomes ignorant (in virtue of his human intellect) and silent. Mary’s humility consists in her true comprehension of her lowliness, as a human creature, compared to God; God’s humility consists in voluntarily taking on the lowliness of a human creature even to the extent of becoming an embryo in the womb. God’s act of humility is a profound act of mercy; He identifies with the objects of His mercy so powerfully that He takes on their deficiencies so that he can elevate them above what any heart could have conceived. De Koninck cites St. Bernard on the humiliation God takes on in the womb of Mary.

“Of all the infirmities or of all the human injuries that the divine goodness has taken on for us, I think that the first in the order of time and the greatest with respect to abasement was when the infinite majesty allowed Himself to be conceived in the womb of a woman and to remain there for the space of nine months...All that time, this wisdom spoke not a word, this power did nothing apparent, this majesty enclosed and hidden did not manifest itself by any visible sign...In the womb He—He Who Is—was as though He were not, and the Eternal Word was silent.”⁶⁹

De Koninck comments on St. Bernard’s words. “And yet in this silence is hidden the most powerful manifestation of the Word: by this silence in the womb of His mother, the Word imitated at the same time in a most striking way His silent procession from the bosom of the Father.”⁷⁰ De Koninck argues that both Mary and the Father are true generators of the Son; he finds many similarities between the divine and human generations although they are also as different as the divine nature is from human nature. Nevertheless, the similarities allow the

⁶⁸ *Ego Sapientia*, 30. “Dans sa parfaite humilité, fondée sur la droite intelligence de sa condition humaine, Marie comprit l’humiliation à laquelle Dieu voulut se soumettre en elle” (*La Sagesse*, 94).

⁶⁹ St. Bernard, *In Annunciatione Domini*, sermo III, n. 4, t. 7, p. 452a; cited in *Ego Sapientia*, 30 (*La Sagesse*, 94-95).

⁷⁰ *Ego Sapientia*, 31; emphasis added. “Et pourtant, dans ce silence est cachée la plus puissante manifestation du Verbe: par ce silence dans le sein de la mère, le Verbe imite en même temps d’une manière très éclatante sa procession silencieuse dans le sein du Père” (*La Sagesse*, 95).

temporal procession of the Son to mirror and manifest to humanity the eternal procession of the Son.

This enables us to see the infinite distance that separates natural generation, even the most perfect, from divine generation, of which it is nonetheless a *profound trace*. Divine generation, indeed, has its source in the absolute plenitude of the divine nature. Natural generation, on the contrary, makes up for the imperfection of cosmic natures. Such natures have to propagate in order to perpetuate and preserve the species: generation makes up for their corruptibility.⁷¹

Divine generation, De Koninck says, comes from the fullness of being of God, while natural generation comes from the neediness of organisms because they die. Nevertheless, natural generation is a “profound trace” of the divine generation; it is also a gift-of-self or overflow of being.

De Koninck points to several ways Mary’s generation of Jesus imitates the Father’s generation of the Son. This imitation is merciful because it is an elevation of a creature to be more like God by imitating the immanent life of the Trinity. In the last chapter will see how this elevation is greater because of evolution. Evolution causes a more inferior creature to become elevated to divinity; it causes the cosmos to become more intimately involved in the Incarnation.

E. Mirroring the Eternal Generation of the Son

De Koninck says that Mary’s generation of Christ mirrors the Father’s generation of the Son. “The Son of God can proceed from within His creation, *thus imitating in the most profound way His generation from the eternal Father*”⁷² Causing a creature to imitate the Trinitarian procession is an act of mercy because it makes Mary more like God. By imitating the divine generation, she partakes more profoundly in the mystery of the Trinity, the very knowledge of which is eternal life. “And this is eternal life, that they know you the only true God, and Jesus Christ whom you have sent” (Jn 17:3).

⁷¹ *The Cosmos*, 333; emphasis added. “Nous voyons par là la distance infinie qui sépare la génération naturelle même la plus parfaite, de la génération divine, dont elle est pourtant un profond vestige. La génération divine, en effet, a sa source dans la plénitude absolue de la nature divine. La génération naturelle, au contraire, supplée à l’imperfection des natures cosmiques. Ces natures doivent se propager afin de se perpétuer et de conserver l’espèce: la génération supplée à leur corruptibilité” (*Le Cosmos*, 129).

⁷² *Ego Sapientia*, 27; emphasis added. “le Fils de Dieu peut procéder du dedans même de sa création, imitant ainsi d’une manière très profonde sa ‘génération du Père éternel’” (*La Sagesse*, 85).

By making Mary the mother of God, God allows the human and cosmic to imitate the eternal and divine. Mary becomes, like God the Father, principle of God the Son; Christ is God from God and God from Woman. St. Thomas writes that every creature desires to imitate the divine in some way. “All things, by desiring their own perfection, desire God Himself inasmuch as the perfections of all things are so many similitudes of the divine being.”⁷³ The Incarnation is a supernatural and superabundant fulfillment of the creaturely desire to be like God. It could never be anticipated that a creature could mirror the Father’s begetting of the Son as Mary does; nor that a creature could be God, as Jesus is.

7. Similarities Between Eternal and Temporal Procession

In meditating on the eternal and temporal processions of the Son, De Koninck discovers a number of similarities between them. I will mention seven.

A. From Her Substance

First, Mary generates Jesus from her own substance as the Father begets the Son from His substance. She forms in her body and contributes what the human mother forms and contributes to the child. Thus she is a true generator.

The generator draws that which is generated from its own substance while forming it...An assimilative action takes place formally in the production of the passive principle of conception, a production which results from the active generative power of the woman, in view of the one engendered,.. For this reason, the mother participates actively in the vital assimilation of the one engendered. She is properly a genetrix.⁷⁴

⁷³ *ST* I 6.1 ad 2: “Omnia, appetendo proprias perfectiones, appetunt ipsum Deum, inquantum perfectiones omnium rerum sunt quaedam similitudines divini esse.”

⁷⁴ *Ego Sapientia*, 7. “Celui-ci tire de sa propre substance l’engendré en le formant... une action assimilative s’accomplit formellement dans la production du principe passif de la conception, production qui se fait par l’active puissance génératrice de la femme, en vue de l’engendré. Pour cette raison, la mère participe activement à l’assimilation vitale de l’engendré. Elle est proprement génératrice” (*La Sagesse*, 28). De Koninck refers to *ST* III 32.4: “In ipsa conceptione Christi beata virgo nihil active operata est, sed solam materiam ministravit. Operata tamen est ante conceptionem aliquid active, praeparando materiam ut esset apta conceptui;” On the matter which was prepared: *ST* III 33.1 arg. 3: “Corpus Christi formatum est ex purissimis sanguinibus virginis.” De Koninck also refers to Cajetan’s commentary on this question. (Cajetan, Commentary on *ST* III 32.3: n. VI-X).

De Koninck is defending the thesis that Mary is a true generator of Jesus against the objection that the virginal conception of Jesus was entirely miraculous. According to the objection, the conception occurred solely by the power of the Holy Spirit, while Mary was only a passive instrument. De Koninck explains that she formed and contributed the “passive principle of conception.” He refers to a text from St. Thomas on Christ’s conception and Cajetans’s commentary on it. St. Thomas believed that women contributed only “blood” and that the semen actively formed the embryo from the blood. Even so, he taught that Mary and all human mothers were true generators because they produced the matter from which the baby was formed.

Today’s biology indicates that “passive principle of conception” is not an adequate description of the ovum, which contains exactly half of the genes responsible for the development of the child. This is a sign that the ovum shares in responsibility for the form of the child; the sperm does not form the child from amorphous matter that the mother contributes, as St. Thomas believed. Once the ovum is fertilized there is a new living being that develops by its own active powers using the genes inherited from both parents as instruments. These two things are true, however: First, the woman receives the ovum, but the man does not receive the sperm. Second, the sperm enters the ovum, but the ovum does not enter the sperm. The active role of the man in the conjugal act is thus reflected in the fertilization of the ovum. Nevertheless, as modern biological observation makes much clearer than medieval biological opinion, the mother plays an active role in generating the child because she actively produces the ovum, which together with the semen, will become the child. In the case of Jesus, the power of the Holy Spirit, instead of semen, acted on the ovum, but it is reasonable to believe that Mary produced and contributed the ovum just as every human mother does. Thus Mary generated Jesus from her substance as the Father generated the Son from His substance. As a result, the Son has the divine nature from His heavenly Father and human nature from His earthly mother. Mary’s gift from her substance imitates the original gift-of-self of the Father to the Son.

There is still an infinite distance between the divine and human generations of the Son as well as a similitude. One aspect of the difference between the two generations, according to De Koninck, is that there is no passive principle, or gametes, between the Father, the generator, and the Son, the generated, as there is between Mary and Jesus. The Father uses no intermediate, bodily or otherwise, to beget the Son. Since the Son proceeds by a procession of knowledge, which is an immanent procession, He proceeds within the Father. “The nature will be expressed in itself.”⁷⁵

B. Giving Her Nature

Mary gives her nature to Jesus so that he has a complete human nature, possessing both body and soul with a human intellect and will. As De Koninck says, “[Mary was] sharing by love in the death of her Son, and in a sense dying in Him because He was bone of her bone, flesh of her flesh.”⁷⁶ Mary was able to suffer so deeply with her Son in his agony on the Cross, because she loved him so profoundly. He had his humanity from her humanity, his body from her body.

Thus it is only to the Mother that the Son of Man owes his similitude in the human species; it is from Mary that He has his whole resemblance according to perfect filiation. In this respect, He is the *consubstantial image* of his mother.⁷⁷

⁷⁵ *The Cosmos*, 332. The fuller context preceding this quotation: “Let us suppose a living being which does not proceed from potency to act, which proceeds immediately from the activity alone of the generating principle, he will have the second sort of generation [procession of a living thing from a living thing] without the first [passage from non-being to being], that is, without the imperfection that an intermediate element introduces, namely the potentiality from which the engendered is drawn.” “Mais supposons un vivant qui ne procède pas de la puissance à l’acte, qui procède immédiatement de la seule actualité du principe générateur: il aura la seconde sorte de génération sans la première, c’est-à-dire sans comporter l’imperfection qu’introduit l’élément intermédiaire, à savoir la potentialité dont on tire l’engendré... la nature s’exprimera dans elle-même” (*Le Cosmos*, 128).

⁷⁶ *In Canticum Canticorum*, 1: 4, t.7, p. 496a, quoted in *Ego Sapientia*, 37: “sic et mater felicissima pro affectu commoriens filio, et quodammodo in ipso moriens, quia os ex ossibus ejus, et caro ex carne ejus ipse” (*La Sagesse*, 116).

⁷⁷ *The Piety of the Son*, 36; *emphasis added*. “C’est donc uniquement à la Mère que le Fils de l’homme doit sa similitude dans l’espèce humaine; c’est de Marie qu’il tient toute sa ressemblance suivant une filiation parfaite. Il est à cet égard l’image consubstantielle de sa mère” (*La Piété du Fils*, 27). De Koninck refers to *ST III 32.3 ad 1*: “Christus conceptus est de Maria virgine materiam ministrante in similitudinem speciei. Et ideo dicitur filius eius. Christus autem, secundum quod homo, conceptus est de spiritu sancto sicut de activo principio, non tamen secundum similitudinem speciei, sicut homo nascitur de patre suo. Et ideo Christus non dicitur filius spiritus sancti.”

Jesus is consubstantial with His human mother as He is consubstantial with His divine Father. Mary's gift of human nature to Jesus mirrors the Father's gift of His divine nature to the Son. Hence Jesus is both the image of his mother "True human from true human" as well as the image of His Father "True God from True God." There is, however, also a difference since Mary and Jesus are not consubstantial the way the Father and Son are.

The similitude of Father and Son is not a common similitude—like the similitude between a human father and son by reason of their common species which transcends them—but a similitude in the identity of one and the same form which entails the diversity of Persons.⁷⁸

The Father generates the Son from His substance in such a way that there is perfect consubstantiality. The Father and the Son are both the very same God. Mary and Jesus, on the contrary, are two human beings although they have a common nature. They are two instances of human nature whereas the Father and Son are one and the same divine nature.

C. By Speaking a Word

The third way that De Koninck says the temporal generation of the Son is like the divine generation is that each was a "procession according to knowledge."⁷⁹ The Father speaks the Word from all eternity; Mary's generation of the Son was also by a word, "Fiat" (Lk 1:38).

Wisdom implies knowledge, a procession according to knowledge. In order that the Blessed Virgin be truly Wisdom, she must, even in relation to God, in addition to her divine maternity according to the flesh, attain to the nature of a first principle according to intellect. That is what she declares in her *Fiat*—*may it be done unto me according to thy word...* M. Olier, in the most express way tells us that in her *Fiat* the Blessed Virgin imitated the procession of the Son in God according to knowledge.⁸⁰

Gabriel announces to Mary the identity of the son she is to bear: "Jesus... the Son of the Most High... the Son of God" (Lk 1:31, 32 and 35). As a result, she can formally assent to her maternity, knowing that her son will be both man and God. She utters her "Fiat" with knowledge

⁷⁸ *The Cosmos*, 333. "La similitude du Père et du Fils n'est pas une similitude commune – telle la similitude d'un père et d'un fils humains à raison de leur espèce commune qui les transcende – mais une similitude dans l'identité d'une même forme qui entraîne diversité de Personnes" (*Le Cosmos*, 129).

⁷⁹ *Ego Sapientia*, 8. "procession selon la connaissance" (*La Sagesse*, 31).

⁸⁰ *Ego Sapientia*, 8-9. "Sagesse dit connaissance, procession selon la connaissance. Pour que la Sainte Vierge soit vraiment sagesse, il faut qu'elle ait, même par rapport à Dieu, en plus de sa maternité divine selon la chair, raison de premier principe selon l'intelligence. C'est ce qu'elle déclare dans son *Fiat*—*qu'il me soit fait selon votre parole...* Que la Vierge imite, dans son *Fiat*, la procession du Fils en Dieu selon la connaissance, M. Olier nous le dit de la manière la plus expresse" (*La Sagesse*, 31-33).

and by her word causes the generation of the Son in her womb, although only through “the power of the Most High,” who deigns to wait for her consent (Lk 1:35).

Just as [the eternal Father] engenders His Word through all eternity by His Knowledge, by a return upon and vision of Himself, so He wills that Mary the supremely perfect and holy image of His virginal fruitfulness, should engender the Word with knowledge; and for that reason He decrees that she shall give her consent to the generation of the word in flesh in an express and solemn way presupposing knowledge and reason.⁸¹

God sends Gabriel to ask for Mary’s consent so that she could mirror His generation of the Son more perfectly. Nevertheless, Mary *engenders the Word by knowledge*, in a very different way from the Father. The Father expresses His knowledge of Himself in a spiritual Word that is the very Person of the Son. Mary expresses her consent to God’s plan in a human word, which God accepts. Then it is God who overshadows her and engenders the Son physically in her womb, using the ovum, which she has prepared.

D. Virginal Generation

Fourth, De Koninck indicates in the last passage that Mary’s generation of the Word made flesh also mirrors the Father’s generation of the Word by its virginal character. Mary conceives Jesus without a human Father. “How can this be since I have no husband?” (Lk 1:34). In this way, too, she mirrors the Father, the fountainhead of the divinity, who begets the Son from His substance with no partner in His begetting. Thus “Mary [is] the supremely perfect and holy image of His virginal fruitfulness,”⁸² as De Koninck, citing M. Olier affirms.

This virginity differs from the Father’s virginity, however, since the Father is the unique fountainhead of the Trinity, the principle without a principle, while Mary is a principle of Jesus through the power of the Holy Spirit. St. Thomas agrees with St. Augustine that Mary is a co-principle of the generation of the Word. “As Augustine says (Enchiridion XI), Christ is said to be

⁸¹ M. Olier, *Vie intérieure de la Très Sainte Vierge* (Paris, 1875), 5-6. Cited by De Koninck in *Ego Sapientia*, 9: “Comme (le Père éternel) engendre son Verbe de toute éternité par sa connaissance, par retour et par vue sur lui-même, il veut que Marie, l’image très-parfaite et très-sainte de sa fécondité vierge, l’engendre aussi avec connaissance; et pour cela même il décrète qu’elle donnera à la génération du Verbe dans la chair son consentement d’une manière expresse et solennelle, ce qui présuppose la connaissance et la raison” (*La Sagesse*, 33).

⁸² Ibid.

conceived or born of the Holy Spirit in one sense; of the Virgin Mary in another—of the Virgin Mary materially; of the Holy Spirit efficiently.”⁸³

E. Generation in Silence

Fifth, as De Koninck notes, there is no sound in the eternal speaking of the Word because it is an intellectual procession within the Godhead, just as there is no sound in the conception and nine month gestation of Jesus in the womb of Mary. “By this silence in the womb of His mother, the Word imitated at the same time in a most striking way His silent procession from the bosom of the Father.”⁸⁴

Not only were the conception and gestation of Jesus silent; St. Thomas teaches that the birth of Jesus was also silent. It was painless without the cries of anguish or deep breaths of labor that usually accompany giving birth in the fallen state. It was silent like the silent procession of the Son from the Father. “But the pain of giving birth of his mother did not pertain to Christ, who came to make satisfaction for our sins. And therefore it was not necessary that his mother should give birth with pain.”⁸⁵ This is not certain doctrine; however, if it is true it increases the similarity between the two generations.

F. Remaining of the Son in Mary

Sixth, the Son remains within the Father eternally, as the Gospel of John makes clear. “I am in the Father” (Jn 10:38); “the only-begotten Son, who is in the bosom of the Father, he has made him known” (Jn 1:18). Similarly, the Son remains in his mother’s womb for nine months and in her heart perpetually. De Koninck cites a beautiful passage from St. Albert on the dwelling of Christ within the womb of His mother.

⁸³ST III 32.2 ad 3: “Sicut dicit Augustinus, in Enchirid., non eodem modo dicitur Christus conceptus aut natus de spiritu sancto, et de Maria virgine, nam de Maria virgine materialiter, de spiritu sancto effective.”

⁸⁴*Ego Sapientia*, 31; emphasis added. “par ce silence dans le sein de la mère, le Verbe imite en même temps d’une manière très éclatante sa procession –silencieuse dans le sein du Père” (*La Sagesse*, 94).

⁸⁵ST III 36.6: “Sicut Christus moriendo destruxit mortem nostram, ita suo dolore nos a doloribus liberavit, et ita mori voluit cum dolore. Sed dolor parientis matris non pertinebat ad Christum, qui pro peccatis nostris satisfacere veniebat. Et ideo non oportuit quod mater eius pareret cum dolore.”

But in the womb of the Blessed Virgin, a womb prepared by the Holy Spirit, all the divinity and all the humanity of Christ were placed and established, and it was thus the proper place of the kingdom: therefore she has been mercy itself and at the same time has been, not without reason, Queen of Mercy.⁸⁶

St. Thomas speaks of the Son dwelling in Mary's soul as well as in her womb, "The Son of God, who is the 'Divine Wisdom' dwelt in her, not only in her soul but in her womb."⁸⁷ Even after Jesus is born, the Son remains perpetually in His mother by faith, hope, and charity. Since she is confirmed in grace, she is confirmed in the theological virtues by which the Trinity dwells in the soul. "Confirmation in goodness was fitting for the Blessed Virgin Mary, because she was the mother of divine Wisdom, in which there is nothing defiled."⁸⁸ But the one who has charity has the Trinity in his soul. "If a man loves me, he will keep my word, and my Father will love him, and we will come to him and make our home with him" (Jn 14:23).

Thus the Son dwelt in the womb of his mother and dwells perpetually in the heart of His mother as He dwells in the bosom of His Father. Again the caveat must be made that there is a great difference in the indwelling in Mary and in the Father. The Son dwelt physically in the womb of His mother; He dwells in His Father in the mysterious spiritual manner of perichoresis. He dwells in her heart by being joined to her mind and will first by faith and charity and now by the beatific vision and charity.

The remaining of the Son in His heavenly Father and in His mother Mary has the nature of the completion a circular motion, as we saw in the last chapter.⁸⁹ The Son comes forth from the Father (without ever leaving Him) and returns to Him in love. He comes forth from His mother and dwells within her by love and brings her physically back to Him in heaven.

⁸⁶ St. Albert, *Mariale*, p. 236 b; cited by De Koninck in *Ego Sapientia*, 39.

⁸⁷ *ST* III 27.4: "Dei filius, qui est Dei sapientia, in ipsa habitavit, non solum in anima, sed in utero."

⁸⁸ St. Thomas Aquinas, *de Veritate* 24.9 ad 2: "Confirmatio autem in bono beatae virginis competebat, quia mater erat divinae sapientiae, in quam nihil inquinatum incurrit, ut dicitur"; cited by De Koninck in *Ego Sapientia*, 12.

⁸⁹ See pp. 196-200.

G. The Permanent Relation of Origin to Mary

Seventh, the Son is always related to the Father as His origin; there is no Father without the Son; nor is there any Son without the Father. The Father reveals the Son and the Son reveals the Father because a relative always manifests its correlative. The Father reveals the Son at His Baptism and Transfiguration. “This is my beloved Son, with whom I am well pleased” (Mt. 3:17) and (Mt. 17:5). Similarly the Son reveals the Father. “If you had known me, you would have known my Father also; henceforth you know him and have seen him” (Jn 14:7). “He who has seen me has seen the Father” (Jn 14:9).

Similarly, the Son is now permanently related to His mother, his human origin. De Koninck says: “The mother is inconceivable without the Son, nor is the Son... conceivable without the mother. She proceeds from Him who made her in order that He might proceed from her.”⁹⁰ De Koninck gives as an argument for the Assumption the fact that if Mary were dead for any length of time then the relation to her would no longer exist for that time.⁹¹ The Son points to His mother on the cross. “Behold your mother” (Jn 19:20). However, it is usually she who reveals her Son rather than vice versa. At the Visitation, Mary says, “My soul magnifies the Lord” (Lk 1:46); at the wedding at Cana, she says, “Do whatever he tells you” (Jn 2:5).

Certainly there are again immense differences in the relationships. The relation of the Son to the Father is more essential than His relation to His mother. The Son is His subsistent relation to the Father, whereas He is not His relation to His mother. The Son always points to His Father, whereas, in a reversed mirror image, it is usually His mother who points to her Son.

De Koninck has shown seven ways that the procession of the Son from the womb of His mother mirrors His eternal procession from the bosom of the Father. First, she generates Christ from her substance as the Father begets the Son from His substance. Second, Mary gives Christ

⁹⁰ *Ego Sapientia*, 10. “La mère ne se conçoit pas sans le Fils, ni le Fils-Rédempteurs sans la mère” (*La Sagesse*, 36).

⁹¹ *Piety of the Son*, 50. De Koninck excepts the three days when Christ was in the grave and his human nature did not exist. (*Pietà du Fils*, 34).

her human nature as the Father gives the Son His divine nature. Third, Mary generates by a word as the Father generates by speaking the Word. Fourth, Mary's generation of Christ is virginal as the Father's generation of the Son is virginal. Sixth, The Son remains in Mary for nine months within her womb and perpetually within her heart by charity as the Son remains eternally within His Father. Seventh, Christ is always related to His mother as origin as He is always related to His Father as origin. We saw gift-of-self in the first and second similarity and circular movement in the sixth. Most of these similarities to divine begetting are common to all human begetting, although the one begotten is in no other case the Son of God. To generate by speaking a word and to be a virgin begetting are unique to Mary's generation of the Son, as are the ways that her Son returns to her.

8. Conclusion

We have looked at De Koninck's doctrine on mercy derived from Aquinas. We have considered its definition, its importance as the deepest cause of God's external acts, and the way to measure its greatness. Mercy is the greatest when it lifts up the lowest to the highest place. Then we have looked, with De Koninck's help, at the exceeding mercy God exercises both in creation and in the Incarnation. We have looked at the mercy shown in Mary's generation of Christ and, in particular, at the mercy shown in allowing Mary's generation of the Son to mirror the Father's eternal generation of the Son. De Koninck uses the term *image* for the Son in His relationship to His mother as well as in His relationship to the Father. He speaks of a gift of nature and a circular movement between the original and the image in both processions. Thus we return to the concepts of gift-of-self and circularity. In chapter seven I will take what we have learned about mercy from this chapter and about gift-of-self and circularity from chapter five and use it to judge evolution. We will find that evolution increases mercy and gift-of-self in the cosmos. Evolution causes the cosmos to be a more perfect image of the Trinity; it causes a more perfect circular movement in creatures coming forth and returning to God.

CHAPTER SEVEN:

UNFOLDING THE IMPLICIT CONNECTIONS

The fossil deposits, the genetic similarities, the nestled family resemblances are evidence for evolution, but not conclusive evidence. This leaves freedom for each man's conclusions. Some deny evolution altogether. Scientists that are reductionists conclude that evolution is a process that doesn't need God; chance and the struggle for existence suffice to explain the development of all life forms. Other scientists who remain open to all of reality see that the direction in evolution toward what is higher and, in particular, toward the evolution of organisms with consciousness, indicates purpose, and even Someone who has purpose, directing the process.

I wish, however, to look deeper than proofs for a Designer. I wish to look at the *meaning* of the evolving cosmos and how it fittingly flows from the nature of the Trinity. Could there be a way that an evolving cosmos is more suitable than a static universe for manifesting God's goodness? We have looked at gift-of-self and the circular order that results from it in the Trinity itself. We have seen that the unity of the circular order is the union of love. We have discovered that the link between gift-of-self in the Trinitarian processions and creation is mercy. It is mercy that causes God to create. But God remains true to His nature. A cause always makes an effect like itself. Therefore creation is imprinted with the gift-of-self and circular order of the Trinity. God gives Himself to creatures and causes a reciprocal gift-of-self in creatures by raising humanity to a union of truth and love with Him.

Now I will argue that evolution intensifies the work of mercy, the circular order, and gift-of-self in creation and the Incarnation. It causes a more perfect imprint of the Trinity in the cosmos.

(1) It increases mercy: A. Evolution lifts up what is lower to become God; it lowers God further when He becomes man. B. Evolution gives more causality to the lower by allowing the lower to be the *ancestors* (in an analogical sense) of God; C. It allows the cosmos to mirror the divine generation of the Son; D. It allows the history of the cosmos to be the temporal procession of the Son. (2) Evolution also perfects the circular order and gift-of-self present in the cosmos. It thereby increases the unity of love in the cosmos. (3) It increases the causality of the divine processions in the maturation of the cosmos. For all these reasons, evolution causes the cosmos to be a more profound image of the Trinity.

1. Mercy Is Increased in the Incarnation by Evolution

A. God Lifts up what is Lower

Evolution both lifts up what is lower to become God and lowers God further when He becomes man. Mercy is increased because both the elevation of the inferior and the bending down of the superior are increased.

We have seen De Koninck's argument that God acts with the utmost mercy in the Incarnation; Christ unites the extremes of human nature, the least perfect intellectual being, to God, the most perfect being. Christ is able to divinize matter, to unite it to the Godhead because humans are hybrid material beings, ensouled bodies. De Koninck applies to the Incarnation the prophecy of Isaiah: "God raises Himself up and causes Himself to be engendered from the most remote limits of His creation. 'Let the earth be opened and bud forth a savior' (Is. 45:8)."¹ Although this is a metaphor, it is interesting to consider how literally it is true if evolution is true. The earth, i.e. inorganic matter, buds forth life that generates Mary, who brings forth the Savior. By assuming a complete human nature, God raises Himself up from the "dust of the ground"

¹ Ego Sapientia, 27. "Dieu se suscite et se fait engendrer aux confins les plus éloignés de sa création: Que la terre s'ouvre, et qu'elle germe le Sauveur- Aperiatur terra, et germinet Salvatore" (La Sagesse, 85-86).

(Gen 2:7). God finds a way to lift up the lowest, matter, and reunite it with Himself, the highest, from whom it came forth in the beginning, because matter is a principle of human nature. He thereby exhibits great mercy.

St. Thomas also writes about God's mercy in the Incarnation. He says that the Incarnation is fitting because it is fitting that the Highest Good should communicate itself in the highest manner possible.

Whatever belongs to the essence of goodness befits God. But it belongs to the essence of goodness to communicate itself, as is evident in Dionysius, *On the Divine Names*, chapter IV. Therefore it is appropriate for the highest good to communicate itself in the highest manner to the creature, and this is brought about chiefly by *His so joining created nature to Himself that one Person is made up of these three—the Word, a soul and flesh*, as Augustine says (*De Trin.* XIII). Hence, it is manifest that it was fitting that God should become incarnate.²

Since it is an essential property of goodness to spread or diffuse itself to others, the highest good should give itself to others in the most intense way possible. There is no higher way to communicate God's goodness than to lift a creature to unity of person with the divine nature so that a creature becomes God. Therefore, the Incarnation is most suitable to God because it is the highest possible way for God to distribute His goodness to creatures. It is the greatest gift-of-self God can give.

St. Thomas writes in an objection that the Incarnation is fitting because it is the only infinite effect by which God manifests His infinite power. Additionally, the Incarnation perfects the universe most of all because it brings the greatest unity to the cosmos when “the last creature—namely, man—is joined to the first principle—namely, God.”³

Further, it belongs to the omnipotence of the Divine power to perfect His works, and to manifest Himself by some infinite effect. But no mere creature can be called an infinite effect, since it is finite of its very essence. Now, seemingly, only in the work of the Incarnation is an infinite effect of the Divine power manifested in a special manner by which power things infinitely distant are united, inasmuch as it has been brought about that man is God. And in this work especially the universe would seem to be perfected, inasmuch as the last creature—namely, man—is joined to

² *ST* III 1.1: “Unde quidquid pertinet ad rationem boni, conveniens est Deo. Pertinet autem ad rationem boni ut se aliis communicet, ut patet per Dionysium IV, *De Div. Nom.* Unde ad rationem summi boni pertinet quod summo modo se creaturae communicet. Quod quidem maxime fit per hoc quod naturam creatam sic sibi coniungit ut una persona fiat ex tribus, verbo, anima et carne, sicut dicit Augustinus, XIII de Trin. Unde manifestum est quod conveniens fuit Deum incarnari.”

³ *ST* III 1.3 arg. 2: “In quo etiam opere maxime videtur perfici universum, per hoc quod ultima creatura, scilicet homo, primo principio coniungitur, scilicet Deo.”

the first principle—namely, God. Therefore, even if man had not sinned, God would have become incarnate.⁴

In his answer to the objection, St. Thomas refuses to grant that only the Incarnation is an infinite effect. He says that creation from nothing is also an infinite effect. Moreover, he says that the universe could have been perfected in another way. Creatures could have attained God by rational creatures' natural knowledge and love. However, he grants that for God to unite man to Himself in the unity of the divine person is an exceedingly great work, so great that "it surpasses the limits of the perfection of nature."⁵

The infinity of divine power is shown in the mode of production of things from nothing. Again, it suffices for the perfection of the universe that the creature be ordained in a natural manner to God as to an end. But that a creature should be united to God in person surpasses the limits of the perfection of nature.⁶

The Incarnation was not necessary to manifest God's infinite power; creation *ex nihilo* did so sufficiently. Nor was the Incarnation necessary to unite nature to its end and for this very reason, it manifests God's goodness and mercy all the more. Although the Incarnation perfects and unifies the universe, it is an extraordinary gift, completely above and beyond anything that could be expected or owed to universal nature or to human nature.

Although the Incarnation infinitely surpasses what is fitting to human nature, St. Thomas says that it is perfectly fitting to the infinite goodness and mercy of the divine nature.

To be united to God in unity of person was not fitting to human flesh, according to its natural endowments, since it was above its dignity; nevertheless, it was fitting that God, by reason of His infinite goodness, should unite it to Himself for man's salvation.⁷

⁴ ST III 1.3 arg. 2: "Praeterea, ad omnipotentiam divinae virtutis pertinet ut opera sua perficiat, et se manifestet per aliquem infinitum effectum. Sed nulla pura creatura potest dici infinitus effectus, cum sit finita per suam essentiam. In solo autem opere incarnationis videtur praecipue manifestari infinitus effectus divinae potentiae, per hoc quod in infinitum distantia coniunguntur, inquantum factum est quod homo esset Deus. In quo etiam opere maxime videtur perfici universum, per hoc quod ultima creatura, scilicet homo, primo principio coniungitur, scilicet Deo. Ergo, etiam si homo non peccasset, Deus incarnatus fuisset."

⁵ ST III 1.3 ad 2: "Hoc autem excedit limites perfectionis naturae."

⁶ ST III 1.3 ad 2: "In ipso modo productionis rerum ex nihilo divina virtus infinita ostenditur. Ad perfectionem etiam universi sufficit quod naturali modo creatura ordinetur sic in Deum sicut in finem. Hoc autem excedit limites perfectionis naturae, ut creatura uniatur Deo in persona."

⁷ ST III 1.1 ad 2: "Uniri Deo in unitate personae non fuit conveniens carni humanae secundum conditionem suae naturae, quia hoc erat supra dignitatem ipsius. Conveniens tamen fuit Deo, secundum infinitam excellentiam bonitatis eius, ut sibi eam uniret pro salute humana."

It is not appropriate, says St. Thomas, for human nature to be united to the divine nature; human nature is completely unworthy of such a dignity. Nevertheless it is fitting for God to give Himself in this unsurpassable way because He is the unsurpassable Good. *Bonum diffusivum sui*. The majesty and grandeur of a starry sky or a snowy mountain range seem more fitting than a tiny baby to reveal the glory of God since He is King of Kings, Creator and Master of the Universe, but He chooses humility and mercy for His final word about Himself. “In many and various ways God spoke of old to our fathers by the prophets; but in these last days he has spoken to us by a Son” (Heb 1:1-2). The poor infant wrapped in swaddling clothes in the stable and the bloody corpse on the cross are a provocation to human understanding. “For the foolishness of God is wiser than men, and the weakness of God is stronger than men” (1 Cor 1:25). God confounds the wise by manifesting His triune life in the humble birth and death of a man.

Yet, if man evolved from the slime of the earth, God shows even more mercy in the Incarnation than if all the species including man were created instantaneously. We saw that De Koninck argues that the measure of mercy is the measure of lifting up that occurs. “In order to gauge the height and depth of what God has chosen to make manifest outside Himself, we must see the lowliness of the nature He has elevated above any other creatures. It is indeed in this that merciful omnipotence most properly shines forth.”⁸ As we saw in Chapter Five, De Koninck argues that God shows more mercy by uniting himself to human nature than to an angelic nature because it is lower. However, if there is universal common descent (taking descent loosely to mean transmission of life even by equivocal generations), then God has united Himself to a lower nature because of evolution. God has united himself to a nature that descended from primates, from reptiles, and even from unicellular organisms like bacteria. As Christ showed more mercy in uniting Himself to a nature descended from sinners than from saints; He also showed more mercy in uniting Himself to a nature descended from bacteria than to one created instantaneously in

⁸ *Ego Sapientia*, 23. “Pour entrevoir l'altitude et la profondeur de la manifestation que Dieu a choisi d'accomplir au dehors, il nous faut voir la bassesse de la nature qu'il a élevée au-dessus de toutes les créatures. C'est en cela même qu'éclate proprement la toute-puissance miséricordieuse.” (*La Sagesse*, 74).

body as well as in soul. Evolution increases the mercy God grants in the Incarnation because the Son lifts up what is much lower than man to become God, or at least to become what becomes God. The lowest becomes the highest. But the highest also becomes the lowest. More mercy is shown in evolution because it lowers God further. He deigns to become the descendent of bacteria by equivocal evolutions.

B. God Gives More Causality to the Lower

God puts Himself in *dependence* on creatures so low that they are not even rational. De Koninck argued that it was more merciful to assume human nature by birth than immediately because God thereby grants to Mary, a human being, one of the lowest of intellectual creatures, the honor of being the mother of God. “In his procession from the Virgin, the Son is made dependent on his Mother.”⁹ But in evolution, Christ is made dependent on all the organisms that precede him in his line of descent. He proceeds from all the prokaryotes, fish, amphibians, reptiles, mammals, and primates who transmitted life through their reproductive powers to Him. He even proceeds from the lifeless matter that became the first living cell. He gives to all that precede Him in the line of descent the honor of being, in some sense, the origin of God. “What the generated possesses, and which is in no way the generator, nonetheless comes from the latter... Corruptibles are naturally sacrificed to future generations.”¹⁰

Only Mary is the proper origin of God, but his other human ancestors are Christ’s origin in a diminished sense and the more primitive antecedent organisms are so in a continually more diminished sense. Prokaryotic life is not reptile life; reptile life is not primate life; primate life is not human life. Therefore transmission of life is said equivocally of organisms that produce

⁹ *Piety of the Son*, 51. “Dans sa procession de la Vierge, le Fils se met dans la dépendance d’une mère” (*La Piété du Fils*, 34).

¹⁰ *The Cosmos*, 282. “Ce que possède l’engendré, et qui n’est aucunement le générateur, lui vient cependant de lui... Les corruptibles sont naturellement sacrifiés à des générations futures” (*Le Cosmos*, 63-64).

higher offspring as instruments of a spiritual power. Nonetheless, there is still a relation of dependence and origin between Christ and all the organisms that brought Him forth.

Let us reread a passage that we considered with respect to Mary and consider it with respect to all of nature.

The assumption of human nature can itself be accomplished in two ways, either immediately, without prior condition, as would be the case if God formed immediately the nature assumed, or by assuming human nature by way of birth, God thus putting Himself in dependence on man and proceeding because of that into the universe itself by way of origination. And the nature itself from which He is born becomes in that way properly the origin of God.¹¹

The proximate nature from which God is born is the human nature of Mary. However, Mary's nature is not a monad, but part of universal nature; she was born of human parents, who were born of human parents, whose life reaches back to the first living organism. More mercy is shown by God putting Himself in dependence on lower organisms and inanimate matter for His generation than if He were to depend on Mary and her human ancestors alone.

C. The Cosmos Mirrors the Divine Generation

Evolution permits the cosmos to imitate God more closely by mirroring the eternal generation of the Son by its history. "The Son of God can proceed from within His creation, *thus imitating in the most profound way His generation from the eternal Father*"¹² writes De Koninck in *Ego Sapientia*. He speaks again of this imitation in *The Piety of the Son*.

Without the Mother, the incarnate Son could not have the nature of son according to humanity, but only according to his birth from the eternal Father. In other words, God has willed that the coming of the Son among us should be a procession by way of birth, which imitates the eternal generation to the point of being, it too, a generation in the most proper sense of the word.¹³

¹¹ *Ego Sapientia*, 27. "L'assomption de la nature humaine peut, elle aussi, s'accomplir de deux manières: soit immédiatement et sans condition préalable, tel serait le cas si Dieu formait immédiatement la nature assumée; soit en assumant la nature humaine par voie de naissance, Dieu se mettant ainsi dans la dépendance de l'homme et procédant par là, dans l'univers même, par voie d'origination. Et l'être même d'où il naît devient par là proprement origine de Dieu" (*La Sagesse*, 84).

¹² *Ego Sapientia*, 27. "Le Fils de Dieu peut procéder du dedans même de sa création, imitant ainsi d'une manière très profonde sa génération du Père éternel" (*La Sagesse*, 85).

¹³ *The Piety of the Son*, 35. "Sans la Mère, le Fils incarné n'aurait pas la nature de Fils selon son humanité, mais uniquement selon sa naissance du Père éternel. En d'autres termes, Dieu a voulu que la venue du Fils parmi nous soit une procession par voie de naissance, qui imite la génération éternelle à ce point d'être, elle aussi, une génération au sens le plus propre du mot" (*La Piété du Fils*, 25).

De Koninck sees the eternal generation of the Son mirrored in his conception and embryonic development as well as in his birth from Mary as is clear in a text we already looked at. “By this silence in the womb of His mother, the Word imitated at the same time in a most striking way His silent procession from the bosom of the Father.”¹⁴ Psalm 110 also invites a comparison between the two generations when it speaks of the Son’s eternal procession from the *womb* of the Father. “From the *womb* of the morning I begot you” (Ps 110:4).

De Koninck likens evolution to embryonic development, as we saw in the treatment of *The Cosmos*. De Koninck quotes a passage from St. Thomas about embryonic development from Book III of the *Summa Contra Gentiles* when he speaks about the *raison d’être* of matter.

This is proved by the process of generation; its product begins by being a fetus, which lives in the manner of plants; to this life succeeds that of the animal, and in the third place life proper to man. In the order of beings produced by way of generation and subject to corruption, there is no more remote or perfect form than this last. The human soul is thus the term of completed generation, and matter tends to arrive at this term which is its final form.¹⁵

St. Thomas is speaking of the orderly development of the embryo from its simplest form, without organs or sensation, to a mature infant as a series of substantial changes directed by a natural impulse from within toward the final most perfect form it is capable of, the human form.

When he comments on St. Thomas’s doctrine of embryonic development, De Koninck calls it “the *evolution* of the human embryo.”¹⁶

It must indeed be granted that evolution follows the general lines sketched by St. Thomas in his doctrine on the evolution of the human embryo—the particular application of the doctrine we have abandoned, but it incontestably holds for the entire cosmic evolution.¹⁷

¹⁴ *Ego Sapientia*, 31. “par ce silence dans le sein de la mère, le Verbe imite en même temps d’une manière très éclatante sa procession silencieuse dans le sein du Père” (*La Sagesse*, 95).

¹⁵ SCG III 22.7: “Quod processus generationis ostendit: primo enim in generatione est fetus vivens vita plantae, postmodum vero vita animalis, demum vero vita hominis. Post hanc autem formam non invenitur in generabilibus et corruptibilibus posterior forma et dignior. Ultimus igitur finis generationis totius est anima humana, et in hanc tendit materia sicut in ultimam formam. Sunt ergo elementa propter corpora mixta; haec vero propter viventia; in quibus plantae sunt propter animalia; animalia vero propter hominem. Homo igitur est finis totius generationis;” cited in *The Cosmos*, 263, *Le Cosmos*, 77.

¹⁶ *The Cosmos*, 289; “l’évolution de l’embryon humain” (*Le Cosmos*, 76).

¹⁷ *The Cosmos*, 289. “Il faut bien admettre que l’évolution suit les lignes générales esquissées par saint Thomas dans sa doctrine sur l’évolution de l’embryon humain – doctrine dont nous avons abandonné cette application particulière, mais qui vaut incontestablement pour l’évolution cosmique tout entière.” (*Le Cosmos*, 76).

De Koninck says that natural beings in the cosmos evolved in history much the same way that St. Thomas thought human embryos evolved in the womb during pregnancy.

If we take De Koninck's comparison of evolution to human embryonic development together with his comparison of the Son's embryonic development to His eternal generation, we might draw a corollary: Evolution, the slow process of development from the first germ of life in the womb of the primitive ocean to human beings, better mirrors the development of the Word both in the "silence of the womb of his mother" and in "His silent procession from the bosom of the Father" than instantaneous creation. The first man was generated from the substance descended from his long line of generators rather than created from nothing, although God created Adam's soul, like every human soul, immediately. The Word was generated from this long line of generators, incorporating all kinds of cosmic beings from the beginning of the world, rather than only from human generators in the last age of the world. De Koninck does not draw this corollary explicitly but it fits with his thought. Evolution allows the cosmos to imitate the Trinity through its historical development in a way that immediate creation of species would not.

It is only because the cosmos is imperfect to begin with, inanimate matter, that it can imitate the generation of God through the process of evolution; if it were created in a state of perfection and completion it could not image the generation of the Son in that particular way. If there were no organic links between living creatures; no universal common descent from an original living cell, the cosmos would not have a history that could image the Son's human and divine generations.

D. The History of the Cosmos is the Temporal Procession of the Son

Not only does evolution imitate the eternal generation of the Son; it *is* the temporal generation of the Son. The fulfillment of evolution is the generation of humanity. The fulfillment of human generation is the generation of the Son, first from the womb of Mary and then from the wombs of all mothers that bear future members of Christ's body. The cosmos itself becomes like

the womb of Mary. The stages of life that are passed through in the process of evolution are the embryonic stages of Christ. What is to become Christ begins as a single cell like a zygote; later it has gills and swims in the amniotic fluid of the prehistoric ocean as the human embryo does in its mother's womb.

Certainly, Christ's created nature is not one substance that is created at the beginning of the cosmos and endures and becomes more human, from age to age. Substantial change occurs in each nuclear or chemical change of nonliving things and in each reproduction of living things; there is a new inorganic substance with a new substantial form or a new organism with a new soul each time. However, there is a goal from the beginning and a plan for the successive generations of inorganic substances and organisms that guides them to their end. The goal connects the transitional organisms; they are each "for Christ." As we saw, St. Thomas thought something similar about transitional forms in embryonic growth. Here is the end of a passage De Koninck gives of St. Thomas about human fetal development, which was already cited in the philosophical section.

In generation of animal and of man, whose form is most perfect, there are many intermediate forms and generations and, consequently, corruptions, since the actual form is produced only by the destruction of the preceding one. Therefore the vegetative soul, which first gives the embryo the life of a plant, is destroyed after a period of time and gives place to a more perfect form, which is both nutritive and sensitive. The embryo lives then with animal life, and when the latter is in its turn destroyed, it is replaced by a rational soul which comes from without, although the two others have existed in virtue of an active principle inherent in the sperm.¹⁸

St. Thomas thought that each stage of fetal development was a different substance with a different substantial form; the first had only a vegetative soul; the second had a sensitive soul; only the final substance had a rational soul and was actually human. Nonetheless, the beginning, the process and the end intimately connected the transitional forms. One could truly speak of a development; since each substance is connected both to what it came from and to what it

¹⁸ *SCG* II 89.11: "Et ideo in generatione animalis et hominis in quibus est forma perfectissima, sunt plurimae formae et generationes intermediae, et per consequens corruptiones, quia generatio unius est corruptio alterius. Anima igitur vegetabilis, quae primo inest, cum embryo vivit vita plantae, corrumpitur, et succedit anima perfectior, quae est nutritiva et sensitiva simul, et tunc embryo vivit vita animalis; hac autem corrupta, succedit anima rationalis ab extrinseco immissa, licet praecedentes fuerint virtute seminis;" cited in *The Cosmos*, 289; *Le Cosmos*, 77.

becomes. Each ontological change comes about through gradual material changes of a substance until a new substantial form replaces the old form.

St. Thomas's explanation of human development may well be false; De Koninck disagreed with St. Thomas. Indeed, according to *Evangelium vitae*, there are highly probable arguments, both scientific and philosophical, that the life of the human person begins at fertilization, though the Church "has not expressly committed itself" on this question.¹⁹ Nonetheless, I propose that evolution is very much like what St. Thomas taught about fetal development. Evolution is the billions of years long *fetal development* of Christ. The divine person of the Son only assumes human nature in Nazareth in the womb of Mary at a certain moment in history, but the Holy Spirit was preparing a body for the Son from the beginning of the creation of the cosmos.

Consequently, when Christ came into the world, he said, "Sacrifices and offerings you have not desired, but a body have you prepared for me; in burnt offerings and sin offerings you have taken no pleasure. Then I said, 'Behold, I have come to do your will, O God,' as it is written of me in the roll of the book (Heb 5-7).

The carbon, oxygen, and hydrogen that composed the body of Jesus were once parts of a star; the quarks and leptons of Christ's physical body that lay in the arms of Mary in the stable in Bethlehem were once elements of the original fireball that exploded at the Big Bang. Cosmic history continues to be the story of Christ's body as new members are born and incorporated by baptism. Each member has a story that stretches back to the galaxies and stars.²⁰

¹⁹ John Paul II, *Evangelium vitae*, 60. See also Francis Etheredge, "The Mysterious Instant of Conception" *National Bioethics Quarterly* 12.3 (Autumn 2012): 421-430. Etheredge ends the article: "Finally, the view that the person comes to exist from the first instant of fertilization is consistent with the general trend in the thinking of the Church that the person, one in body and soul, begins at conception."

²⁰ St. Thomas speaks of the way "new species" of animals were present in the powers of the original stars and elements in the *Prima Pars*. *ST I* 73.1 ad 3.: "Nothing entirely new was made by God afterwards, but all things proceeded before in the work of the six days...Species, also that are new, if any such appear, existed before in various active powers; so that animals generated by rotting and even new species of such animals, are produced by the powers of the stars and elements which they received in the beginning;" "nihil postmodum a Deo factum est totaliter novum, quin aliquantulum in operibus sex dierum praecesserit... Species etiam novae, si quae apparent, praeexistunt in quibusdam activis virtutibus, sicut et animalia ex putrefactione generata producuntur ex virtutibus stellarum et elementorum quas a principio acceperunt, etiam si novae species talium animalium producantur."

E. Cosmic Texts in Scripture

There are a number of cosmic texts in Scripture, like the Hymn of Colossians, the beginning of Hebrews, the Hymn of Ephesians, chapter eight of Romans, and much of Revelation that fit well with this theological interpretation of evolution. They speak about Christ and His body, the Church, as the goal of the cosmos. Everything is created for Christ as well as through Him. Evolution provides a new lens through which to read them; the cosmos is for Christ because it is the womb of His developing body. It has no meaning beside its order toward bringing forth Christ, head and body and serving Christ, head and body. Cosmic history is the generation of Christ from this womb, beginning with the Big Bang, and completed at the eschaton.²¹

Let us look first at the Hymn of Colossians.

He is the image of the invisible God, the first-born of all creation, for in him all things were created, in heaven and on earth, visible and invisible, whether thrones or dominions or principalities or authorities—all things were created through him and *for him*. He is before all things, and *in him all things hold together* (Col 1:15-17). He is the head of the body, the Church; he is the beginning, the first-born from the dead, that in everything he might be pre-eminent. For in him all the fullness of God was pleased to dwell, and through him to reconcile to himself *all things*, whether on earth or in heaven, making peace by the blood of his cross (Col 1:18-20).

All things were created *for* Christ, the point of arrival for the evolving cosmos. He is also the one *through* whom everything was created, i.e., the origin together with the Father, and the one who *holds together* everything, the center within. His role in salvation follows from His role in creation; just as the Father creates through Him, He also reconciles *all things* through the Son. The Son unites under His headship everything on earth, both cosmos and Church, with all things in heaven, including the angelic hierarchies, by *the blood of his cross*

Hebrews also speaks of the Son as the origin, goal and central unifying power.

In many and various ways God spoke of old to our fathers by the prophets; but in these last days he has spoken to us by a Son, whom he appointed the *heir of all things*, through whom also he created the ages. He reflects the glory of God and bears the very stamp of his nature, *upholding the universe by his word of power*. When he had made purification for sins, he sat down at the right hand of the Majesty on high, having become as much superior to angels as the name he has obtained is more excellent than theirs. For to what angel did God ever say, “You are my Son,

²¹ See analysis of some cosmic NT texts and their relevance to evolution by Christoph Cardinal Schönborn in *Chance or Purpose; Creation, Evolution and a Rational Faith* (Ignatius Press: San Francisco 2007) 132-140.

today I have begotten you”? Or again “I will be to him a father, and he shall be to me a son”? (Heb 1:1-5).

Again the Son is the origin, the one through whom the Father *created the ages*, the center within, *upholding the universe by his word of power*, as well as the end and goal, *the heir of all things*.

Christ is the origin because He is the Word, the Logos, who perfectly reflects the glory of the Father. Because He bears the stamp of the divine nature, He contains all other possible natures that imitate the divine nature in some limited way. The Father speaks the natures, which are to be created and evolved in the Word, and, through the Word and the Spirit, they come to be.

Christ is the center because, together with the Father and Spirit, He continuously gives being and activity and the power of causality to all the creatures of the cosmos. He upholds the universe so that it can share in his word of power to the extent of participating in the causality of evolution. He sustains the activity of cosmic beings so that they can generate each new species in order according to the words or natures spoken in the Word and finally they can generate humanity and the human nature of Christ, the goal.

Christ is the Son and heir of cosmic evolution as well as the heir of the covenant. All of cosmic history is the history of his temporal generation. He is the shoot from the stump of stellar nebulae by evolution as well as the “shoot from the stump of Jesse” (Is 11:12);. He is the Redeemer King who is lifted up to heaven to sit at the Father’s right hand because He died for us. He has become superior to the angels although He began bodily as amorphous plasma in the primal atom, inferior to dirt. The Father purifies us from sins through the same Son, by whom He created and upholds the universe. The Father makes Christ the heir of all things when all creation becomes joined to Him as His bride. Whatever no longer remains bodily of the cosmos at the end of the world will nevertheless belong to Christ as part of his temporal generation and part of His memory and vision as well as that of His members.

Hebrews refers to the Son’s generation with the words, “You are my Son, today I have begotten you.” The generation of the Son during the whole age of the cosmos through evolution

imitates more closely the eternal *today* of the divine generation of the Son. There is no time from the beginning of the cosmos until its end when Christ is not being generated as head or in his body.

The Hymn of Ephesians also speaks of Christ as the goal; the union of all things in Christ is the Father's *plan for the fullness of time*. The Father chose us in Christ *before the foundation of the world*. Wisdom is understanding that the meaning of everything, the mystery of the Father's will, is His purpose to unite everything in Christ, both *things in heaven and things on earth*. Things on earth are more united to Christ if their entire history is the generation of Christ's body by evolution.

Blessed be the God and Father of our Lord Jesus Christ, who has blessed us in Christ with every spiritual blessing in the heavenly places, even as he chose us in him before the foundation of the world, that we should be holy and blameless before him. He destined us in love to be his sons through Jesus Christ, according to the *purpose of his will*, to the praise of his glorious grace which he freely bestowed on us in the Beloved. In him we have redemption through his blood, the forgiveness of our trespasses, according to the riches of his grace which he lavished upon us. For he has made known to us in all wisdom and insight the *mystery of his will*, according to his purpose which he set forth in Christ as *a plan for the fullness of time to unite all things in him, things in heaven and things on earth* (Eph 1:3-10).

Ephesians also speaks of Christ being *head over all things*, cosmos and Church, filling everything with Himself.

He has put all things under his feet and has made him the *head over all things for the Church*, which is his body, the fullness of *him who fills all in all* (Eph 1:22-23).

He who descended is he who also ascended far above all the heavens, that *he might fill all things* (Eph 4:10).

Cosmos and Church are united in Christ. The cosmos generates Christ and his Church. It will be contained ontologically in Christ and His members' bodies and intentionally within the souls of Christ and the members of the Church, by knowledge. In that way, the whole cosmos will be part of Christ's body and placed under His feet. It will be part of the *fullness of him* because it will be part of the bodies and souls of His members. Part of the glory of the saints will be the vision of the evolution of the cosmos toward Christ.

In Romans, St. Paul speaks of the solidarity between the cosmos and Christians because of their shared pain and subjection to decay. The cosmos is identified so strongly with its principal parts, Christ and His members, that St. Paul speaks of *the whole creation groaning with labor pains*, longing to give birth to the *sons of God* (Christ and his body). This longing is the continuation of what De Koninck calls cosmic love for man, although it is for man redeemed. The text speaks of groaning for adoption as sons of God but that adoption could not take place until Christ and his brothers were first generated physically by the evolving cosmos. The whole of creation is then redeemed and set free when the sons of God are adopted and their *bodies* redeemed.

For the creation waits with eager longing for the revealing of the sons of God; for the creation was subjected to futility, not of its own will but by the will of him who subjected it in hope; because *the creation itself will be set free* from its bondage to decay and obtain the glorious liberty of the children of God. We know that *the whole creation has been groaning with labor pains together until now*; and not only the creation, but we ourselves, who have the first fruits of the Spirit, groan inwardly as we wait for adoption as sons, the redemption of our bodies (Rom 8:19-23).

Although Christ has already come and died to obtain our liberation from the bondage of sin and decay, we have evidently not yet fully obtained the redemption of our bodies for which we long. We still struggle with concupiscence, disease, and death. Natural disasters like hurricanes and tsunamis still threaten humans every year. The cosmos is not Eden. Therefore *creation* [the cosmos] still *waits with eager longing for the revealing of the sons of God*. The cosmos, as a whole, will achieve liberation from decay when its principal members are fully revealed and their bodies redeemed at the resurrection.

The Book of Revelation describes the end and fulfillment of history as the wedding of Christ with his bride, the Church. “Then I saw a new heaven and a new earth... And I saw the holy city, new Jerusalem, coming down out of heaven from God, prepared as a bride adorned for her husband” (Rev 21:1-2). The cosmos is not discarded but renewed and made more beautiful. The wedding is described as a new creation; the One who began things by creating them will recreate them. “Behold, I make all things new...It is done! I am the Alpha and the Omega, the beginning

and the end” (Rev 21:5-6). The circular order of the Trinity is perfectly imitated by the cosmos coming out from Christ as Creator, the Alpha, and returning to Christ as Bridegroom, the Omega, through the blood of Christ as Redeemer. We will see in the next section how this circular order is increased in the cosmos by evolution.

All of these passages from Scripture show the cosmos ordered to Christ and fulfilled by the redemption and completion of his Body, the Church. The resurrection of the bodies of the saints is the recreation of the cosmos bodily. God will fill the cosmos in a new way by dwelling in the saints through the beatific vision. Christ will be the head; the Church will be His body and He will “fill all things” (Eph 40). Evolution intensifies the ordering of the cosmos to Christ and thus adds a new layer of meaning to these texts. It grants greater importance to the cosmos because it is the generator of Christ and His members in a more profound way; the cosmos remains in its heir both bodily and intentionally more intensely. The resurrection of the body is more important because the bodies of Christ and the saints are overwhelmingly the goal of cosmic history.

Evolution gives the maximum possible unity to the cosmos, a unity that gives meaning to the whole of history and to all the various bodies that make up or have made up the cosmos. Evolution is not only driven by an impulse to produce a rational creature that images the generation of the Son most perfectly by his thought, but the process of evolution is itself an image of the eternal divine generation, as well as the actual temporal generation of God in his human nature. The goal of cosmic evolution is to generate Christ as head, and then the predestined number of saints to fill out His body.

Bringing about the perfection of the cosmos through the process of evolution rather than by instantaneous creation of species shows more mercy because it grants more causality to creatures in the Incarnation; it gives the whole cosmos the honor of being the generator of God. It lifts up what is lower, inanimate matter, to become God. The superior bends down lower; God places Himself in dependence on what is lower—all the substances in the generations that led to Mary, as well as Mary and her forebears. It gives more causality to the lower by permitting them to

become generators of God. It allows the lower to imitate God's inner life in a particular way, by allowing the whole cosmos to mirror the divine generation of the Son and the procession of the Holy Spirit. Finally, evolution makes the history of the cosmos the temporal procession of God.

2. Circularly and Gift-of-Self are Perfected by Evolution

Evolution causes the cosmos to be a more perfect image of the Creator. The unity of order of the Trinity, which is reflected in the cosmos, is the circular order of the processions. The Son comes forth from the Father and returns to Him in the Holy Spirit. Evolution causes a more perfect circular order in creatures coming forth and returning to God; the Son comes forth over the eons from the cosmos and then brings it back to the Father by the power of the Holy Spirit. Moreover, just as the *exitus* of Creation was through the causality of the Word and the Holy Spirit, the *reditus* of the evolving cosmos increases the causality of the Word and Holy Spirit in the return.

St. Thomas speaks about two kinds of unity in the Trinity when he comments on the phrase from John 17, "that they may be one; even as we are one" (Jn 17:11).

The Father and the Son are one in two ways: by essence (*per essentiam*) and so he says, "I and the Father are one" (John 10); and by the harmony of love (*consonantia amoris*) and this union is through the Holy Spirit, and about this union it says in John 17, "that they may be one in us as we are one," namely by the harmony of love, for it is in this way that we are all one in God, and not by essence. For if there were no other union in God except by essence, the Lord would not have said, "That they may be one in us as we are one." Therefore it is understood about the unity which exists by the harmony of love.²²

The three divine persons are not only one because of their undivided essence; they are also one because of their love for each other. St. Thomas claims that there is an analogous harmony of love between men. De Koninck claims that there is, further, an analogous harmony of love in the cosmos as a whole. Since the cosmos is composed of millions of substances, it can never have

²² *Lectura Romana*, d. 10 q. 3 ad 3: "Pater et Filius sunt unum dupliciter: per essentiam, et sic dicit: *ego et Pater unum sumus*, Ioannis X; et per consonantiam amoris, et haec unio est per Spiritum Sanctum, et de hac dicitur Ioannis XVII: *ut sint unum in nobis sicut et nos unum sumus*, scilicet per consonantiam amoris, hoc enim modo omnes unum sumus in Deo et non per essentiam. Si enim non esset alia unio in divinis nisi per essentiam, non diceret Dominus, *ut sint unum in nobis sicut et nos unum sumus*. Unde intelligitur de unitate quae est per consonantiam amoris."

essential unity like the Trinity, or even like a single species, such as man, although it does have the formal unity of a heterogeneous whole composed of different parts.²³ However, evolution intensifies cosmic unity by uniting the parts from within by the harmony of love. God is not a builder that places boards, nails and glass in an order according to plans and a goal that He alone possesses. He is more like a conductor that directs an orchestra made up of members, every one of whom has memorized the music of the symphony and wishes to play his part in the whole. The subhuman parts of the cosmos do not explicitly understand the goal but they do have instincts or natural desires implanted in their nature, by which they move themselves toward the goal.

There is a rhythm of *sacrifice* in nature, of dying to give life that is enhanced in evolution. “One might say the inorganic universe is assumed into life by sacrificing itself to it.”²⁴ The lower organism is sacrificed to bring forth the higher. Yet, just as one must say that the lioness who sacrifices by dying to defend her cubs is acting naturally, one must also say that lower organisms that sacrifice by failing to reproduce their kind when they act as instruments to generate a higher organism are acting naturally. In both cases the living beings are acting out of cosmic love, a tendency that is placed within them by their Creator.

Even prescinding from evolution, De Koninck sees gift-of-self everywhere in nature. In every substantial change the prior substance must be worked on; it must undergo “a veritable *factio* in which the generated is modeled, a formation parceled out in time. A living being is under construction before it exists.”²⁵ This means that the prior substance must sacrifice itself to become

²³ “The ensemble of parts that compose the homogeneous whole constitute a material or accidental unity of order; the heterogeneous whole on the contrary constitutes a unity of the formal or *per se* order and is more perfect to the degree that it is more essential... But it is in this unity of a formal or *per se* order that the perfection of the universe consists.” (*The Cosmos*, 316-317); “L’ensemble des parties qui composent le tout homogène constitue une unité d’ordre matérielle ou accidentelle; le tout hétérogène au contraire constitue une unité d’ordre formelle ou *per se*, et qui est plus parfaite à mesure qu’elle est plus essentielle... Or, c’est dans cette unité d’ordre formelle ou *per se* que consiste la perfection de l’univers” (*Le Cosmos*, 112).

²⁴ *The Cosmos*, 242; emphasis added. “On dirait que l’univers inorganique est assumé dans la vie en se sacrifiant à elle.” (*Le Cosmos*, 10).

²⁵ *The Cosmos*, 281. “une véritable *factio* dans laquelle l’engendré est modelé, une formation répartie dans le temps. Un être vivant est en voie de construction avant qu’il n’existe” (*Le Cosmos*, 62).

the new substance. “Corruptibles are naturally *sacrificed* to future generations.”²⁶ The old substance gives its remodeled self to become the new substance, which then retains traces of the old. “What the generated possesses, and which is in no way the generator, nonetheless comes from the latter... All beings thus bear the traces of one another.”²⁷ The old substance gives itself to the new substance so that the new substance possesses what had belonged the old one, as its own, without losing traces of what had been the determining features of the old. Iron and sulfur become iron sulfide, not manganese oxide. Even more clearly in the case of life, the living being “communicates its own life in the generation of similars... Here already there is a gift-of-self by the self, that is, life.”²⁸ Dogs beget dogs, not cats.

If, however, there were no evolution, according to De Koninck, there would only be multiplication of individuals or closed cycles like the food cycle or the nitrogen cycle. They would not be driven by love for the human form, which leads to an interior desire to be given in order to reach the longed for goal.

Without doubt, an ascendance is already realized in the most elementary of vital functions, nutrition. Grass assimilates air and water, the cow assimilates the grass, and man the cow... But this cycle remains closed on itself if there has only been the inorganic, plants, animals: the world would be open only to individual multiplication. Such an ascendancy is not realized by the internal drive of lower natures ordered to higher, but by an attraction from on high to which they *passively* submit... The idea of progress is thus reduced to purely quantitative increase. But that is a type of *evolution* that is at bottom only a dispersion, a regression.²⁹

Natural beings are corruptible, so even a creationist cosmos would require constant generation to maintain life on earth. Progress would be multiplication of individuals in living species, but

²⁶ *The Cosmos*, 282; emphasis added. “Les corruptibles sont naturellement sacrifiés à des générations futures” (*Le Cosmos*, 64).

²⁷ *The Cosmos*, 282. “Ce que possède l’engendré, et qui n’est aucunement le générateur, lui vient cependant de lui... Tous les êtres portent ainsi des traces les uns des autres” (*Le Cosmos*, 63-64).

²⁸ *The Cosmos*, 303. “communique sa propre vie dans la génération de semblables... Ici, déjà, il y a don de soi-même par soi-même, c’est-à-dire vie” (*Le Cosmos*, 96).

²⁹ *The Cosmos* 284. “Sans doute, une ascendance se réalise déjà dans la plus élémentaire des fonctions vitales – la nutrition. L’herbe assimile l’air et l’eau, la vache assimile l’herbe, et l’homme la vache... Mais ce cycle reste fermé sur lui-même s’il y a toujours eu de l’inorganique, des plantes, et des animaux: le monde n’est ouvert qu’à la multiplication individuelle. Pareille ascendance n’est pas réalisée par la poussée intérieure des natures inférieures ordonnées aux natures supérieures, mais par une attraction d’en haut qu’elles subissent passivement... L’idée de progrès est ainsi ramenée à un grossissement purement quantitatif. Mais voilà un genre d’évolution qui n’est au fond qu’une dispersion, une régression” (*Le Cosmos*, 68-69).

indefinite multiplication of individuals does not lead to greater unity and perfection but to scattering and disunity. Once the cosmos reached an optimal number of individuals of each species for each habitat, there would be approximately equal numbers of births and deaths for the rest of history. There would be no inner principle in natural beings with a preferential tendency toward the generation of cow from grass over the generation of minerals from cow. One would have to say that matter is indifferent to what form it receives. All generations would occur by *passive submission* to the spiritual power or powers that govern nature.

One might say that, even without evolution, prime matter must be ordered principally to the highest form it can receive since potency is always ordered to act. However, if this ordination made no impression on cosmic history, it would be an exterior ordination or a relation of reason in the creator rather than a real relation in prime matter. In the evolving cosmos, as De Koninck conceives it, there is a dynamic impulse of love running through all of nature. Every natural being contains matter as a constituent element, but matter is desire for form and above all for the form of man.

Love comes first in the cosmos, announces De Koninck. “Love precedes knowledge in the evolution of nature.”³⁰ Certainly knowledge must precede love in the spiritual power that governs evolution, but “if we consider love as the aptitude or proportion of a thing to some other thing—as potency is aptitude to act—there is love in the inanimate and vegetative as well as in the knowing.” There was love from the first instant of the cosmos in the matter of the first bodies that were created. Because of this love that matter is, evolution is natural. It responds to the deepest desire of nature.

It is thus that matter is, in all its essence, a love of the human soul in which love becomes consubstantial. And it is just toward consubstantial love that the whole universe tends, that is toward the love of self for itself, not doubtless as ultimate end, but as the pre-condition of the explicit return to the First Principle by love.³¹

³⁰ *The Cosmos*, 307. “L’amour précède la connaissance dans l’évolution de la nature” (*Le Cosmos*, 101).

³¹ *The Cosmos*, 309. “Et c’est ainsi que la matière est, de toute son essence, un amour pour l’âme humaine en laquelle l’amour devient consubstantiel. Et c’est justement vers l’amour consubstantiel que

The equivocal generations that De Koninck calls mutations, by which organisms generate offspring of a higher species, intensify the gift-of-self that is present in normal reproduction. The generators, which are not properly parents, sacrifice their specific life out of love for humanity. In reproduction, parents always give their life to offspring; they produce replacements for themselves. They may even sacrifice their lives to feed or protect their offspring; however, they gain immortality or at least a much longer life in the species. Equivocal generators, in contrast, sacrifice even their continuance in the species for love of man.

Let us look again at the first text in which De Koninck speaks of gift-of-self in evolution.

In the idea we make for ourselves of evolution, infrahuman beings are essentially in function of man, and fleeting: these natures thus are open to one another, constituting in their ascension toward him a more and more determined and powerful drive. But one should not conclude from this that this function is reduced to a pure canalization of the spiritual energy with which the cosmos is impregnated. This is too simplistic an interpretation. Necessarily a work of nature is a *gift of self*, so that evolution will be a *gift of self* in the precise degree that it is a work of nature, without which the concept of nature would become an exclusively passive principle.³²

Lower natures are *open* to one another. There is a flood of self-gift from lower to higher. “By its ordination to life, which is its *raison d’être*—already the non-living begs to be given it: it gives out of its desire to be given by its natural appetite.”³³ Nothing natural is inert; everything natural has a dynamic order to the end placed in it by its Creator. Even though non-living things must be moved, that motion can either be a fulfillment of their natural ordination or violent. Therefore the equivocal generations that bring about the ascent of evolution are natural because they are fulfilling the desire of cosmic beings to give or be given for the sake of man. As evolution brings forth higher beings with more perfect knowledge, the love becomes more interior.

tend l’univers tout entier, c’est-à-dire vers l’amour de soi-même par soi-même, non sans doute comme fin dernière absolue, mais comme condition préalable du retour explicite au Premier Principe par l’amour” (*Le Cosmos*, 103).

³² *The Cosmos*, 302, translation modified. “Dans l’idée que nous nous faisons de l’évolution, les êtres infrahumains sont essentiellement fonction de l’homme et passagers: ces natures sont par là entr’ouvertes les unes sur les autres, constituent dans leur ascension vers lui un élan de plus en plus déterminé et puissant. Cependant il ne faut pas en conclure que cette fonction se réduit à une pure canalisation de l’énergie spirituelle dont le cosmos est imprégnée. Cette interprétation est bien trop simpliste. Nécessairement une œuvre de nature est un don de soi, et par conséquent l’évolution sera don de soi, *dans la mesure précise où elle est une œuvre de nature*, faute de quoi le concept de nature se ramènerait à celui de principe exclusivement passif” (*Le Cosmos*, 95).

³³ *The Cosmos*, 303. “Par son ordination à la vie qui est sa raison d’être –, déjà le non-vivant mendie pour donner: il donne par son désir d’être donné, par son appétit naturel” (*Le Cosmos*, 95-96).

The principal goal of this motion is not to make use of the passivity of nature, but to increase love in it so that the desire might spring from a more and more profound interiority, proceed more and more from the within of nature by means of knowledge, and that love increase with consciousness, and in it, to arrive finally at a love reflected on itself.³⁴

Only a being that can reflect on itself can possess itself sufficiently to make a conscious gift-of-self. The torrent of gifts-of-self in the ascent of evolution is to produce a cosmic being that can give itself back to its Creator. “And in this way is accomplished the generosity which nature is.”³⁵

Evolution increases the union of love in the universe because it places natural love in every being even the first and lowest being there ever was. Natural love begins as love for the form of man; when the form of man is reached the cosmos can make an explicit return to its principle through man’s love for God. The circular motion of the cosmos begins by a procession out of God in the creation of the first matter; the cosmos returns to God through countless mutations until man evolves who can return to God on the natural level by knowledge, love and praise. In the supernatural order, the cosmos returns to God first, by the hypostatic union of man with God in Christ and second, by all the saints united to God in the beatific vision. Although matter would be united to God in the Incarnation even in a static cosmos, evolution causes a more profound circular motion carrying matter from the beginning in its most primitive state by the impulse of love to man, and through man, back to God.

All subhuman things thus tend toward God by their tendency toward the human species to which they are immediately ordered and in which the trajectory of their desire is accomplished. They are love of and desire for man by their very tendency toward the explicit love of God.³⁶

The culmination of the circular movement of the cosmos, impelled by love, is Christ. He comes forth from all eternity from the Father, proceeds into the world in His visible mission and

³⁴ *The Cosmos*, 309. “Le but principal de cette motion n’est pas de se servir de la passivité de la nature, mais de faire grandir en elle l’amour afin que le désir jaillisse d’une intériorité de plus en plus profonde, qu’il procède de plus en plus du dedans de la nature au moyen de la connaissance, et que l’amour grandisse avec la conscience, et en elle, pour en arriver enfin à un amour réfléchi de soi” (*Le Cosmos*, 103-104).

³⁵ *The Cosmos*, 303. “Et par cela même il accomplit cette générosité qu’est une nature” (*Le Cosmos*, 96).

³⁶ *The Cosmos*, 308 ; translation modified. “Toutes les choses infrahumaines tendent ainsi vers Dieu par leur tendance vers l’espèce humaine à laquelle elles sont immédiatement ordonnées et en laquelle la trajectoire de leur désir s’accomplit. Elles sont amour et désir de l’homme par leur tendance même vers l’amour explicite de Dieu” (*Le Cosmos*, 101).

perfectly unites, in His person, the cosmos and its creator *ontologically*: “I and the Father are one,” (Jn 10:30) as well as *by truth and love*: “No one knows the Father but the Son” (Mt 11:27); “that the world may know that I love the Father” (Jn 14:31). As the Father creates the cosmos through His Word and Love; He brings it back to Himself through His Word and Love.

De Koninck writes of the bond of creature and creator in Christ, “The same Son arises from two extremes of the universe, reuniting our lowliness with His supreme grandeur...God raises Himself up and causes Himself to be engendered from the most remote limits of His creation.” The circular movement of creation is completed in Christ. This is the Father’s plan for Christ from all eternity “to unite all things in him, things in heaven and things on earth” (Eph 1:10).

De Koninck writes about the circular motion in the Trinity in *Ego Sapientia*; he writes about the circular movement and gift-of-self in the evolving cosmos in *The Cosmos*. However, he does not argue explicitly, as I do, that evolution perfects the circular order and gift-of-self of the cosmos and makes it more like God.

3. Causality of the Divine Persons is Increased by Evolution

Evolution increases the causality of the Son and the Holy Spirit in the coming to perfection of the world and its return to its principle. The Father creates through His Word, who contains the archetypes according to which He forms things and through His love. The perfecting and return begins with the ascent to man by evolution through the Word and the impulse of Love. The final return of the cosmos in humanity is also through the Son and the Spirit: the natural return in knowledge is assimilation to the exemplar of the Son; the natural return in love is assimilation to the exemplar of the Holy Spirit through natural religion. The supernatural return is through the missions of the Son and the Spirit.

A. The Son

As we have seen in the theological section of *The Cosmos*, De Koninck says that evolution is driven by an impulse towards perfecting an image of the Trinity; there are increasingly more perfect traces of the divine persons in each rank of creature culminating in humans, who are images, formally speaking, of the Trinity.

Hence infrahuman beings, in the measure that they tend toward man, tend as well, insofar as they are more or less profound traces, toward the image of the Trinity that is the human soul. From this point of view, we can consider the evolution of the cosmos as a maturation of traces which will terminate in an image of the Trinity. In evolution, the Trinity draws the world to itself in order to imprint on it its image.³⁷

Evolution increases the exemplar causality of the Son because the Son is the divine *Image*, the Word in whom the Trinity is spoken, to which natural beings are approaching in the ascent of life. “The Father, by understanding Himself, the Son and the Holy Spirit, and all other things contained in His knowledge, conceives the Word so that the whole Trinity is spoken in the Word and also all creatures.”³⁸

But evolution is also an impulse towards a more perfect imitation of the actual *generation* or the coming forth of the Son. The lower the creature, the more exterior the emanation is that proceeds from it; the higher the creature, the more interior the procession or emanation becomes. De Koninck cites and comments on a treatment of emanations in Book Four of the *Summa Contra Gentiles*.³⁹ There, St. Thomas approaches the processions in God by meditating on the increasing interiority of the emanations and the increasing unity between the engendered and the generator in ascending the hierarchy of being.

³⁷ *The Cosmos*, 330. “Et par là, les êtres infrahumains, dans la mesure où ils tendent vers l’homme, tendent aussi, en tant qu’ils sont des vestiges de plus en plus profonds, vers l’image de la Trinité qu’est l’âme humaine. À ce point de vue, nous pouvons considérer l’évolution du cosmos comme une maturation de vestiges qui se terminera à une image de la Trinité. Dans l’évolution, la Trinité tire à soi le monde afin de lui imprimer son image” (*Le Cosmos*, 126).

³⁸ *ST* I 34.1 ad 3: “Pater enim, intelligendo se et filium et spiritum sanctum, et omnia alia quae eius scientia continentur, concipit verbum, ut sic tota Trinitas verbo dicatur, et etiam omnis creatura.”

³⁹ *SCG* IV.11; cited in *The Cosmos*, 303-304; *Le Cosmos*, 96-96.

St. Thomas notes that in inanimate things like minerals there is no interior emanation. One body must act on another body externally by touching it or by a power going out to another body. For example, a hot stove heats a pot of water, or a magnet magnetizes a needle.

Next St. Thomas considers plants, for in plants, there is a partially internal emanation. The plant takes in external bodies, namely water and minerals from the soil, but by an interior process initiated from its own form transforms them first into its own substance as it grows, and then into seeds which break off from the parent plant and grow into new plants.

In animals, according to St. Thomas, there is a more interior emanation in the processes of sensation, imagination, and memory. There is still an external source; the animal perceives sensible bodies. However, the sensible species is received within the animal and remains within the animal. First the species is received by the external senses like sight and hearing. From there the species is transferred to the imagination, and from the imagination it is transferred to the memory.

In man, De Koninck explains, there is a further step in interiority. Man's knowledge still begins, like that of irrational animals, from an external source, since all human knowledge starts from sensation. However, once the intellect has abstracted the intelligible species from the phantasms present to it in the imagination, it forms an interior word. This expression of the concept or interior word remains within the intellect. As a second step, the human intellect can reflect upon its own activity of knowing. In knowing itself, the intellect also forms an interior word. This is the most interior emanation of man. De Koninck distinguishes human self-consciousness from animal consciousness. "The animal has consciousness, but he does not know that he knows. He cannot express himself to himself, he does not compenetrates in the consciousness of self."⁴⁰

⁴⁰ *The Cosmos*, 304. "L'animal a la connaissance, mais il ne sait pas qu'il connaît. Il ne peut 'se dire' à soi-même, il ne se compénètre pas dans la conscience de soi." (*Le Cosmos*, 97).

In God, there is still more perfect interiority. God not only knows Himself through Himself, but His act of knowing is the same as His act of being. Thus God is Himself the object known, the intelligible species, or Word, by which He is known, His act of understanding, and His act of being. There is perfect unity between the Father who generates and the Word engendered.⁴¹ “There will be both propagation of nature and absolute identity of nature: the nature will be expressed in itself. It is thus that the Word is enclosed in His procession from the Father,”⁴² explains De Koninck.

There is a more perfect reflection of the divine processions in the emanations of creatures as they rise in the ladder of being. Thus a goal of cosmic evolution is to perfect creaturely generation so that it represents the generation of the Son more perfectly. The progress of life is progress towards a creature whose operations involve a greater interiority of emanation, more perfect unity between the creature and what emanates, as well as a greater nobility of the term of communication. Instead of a static hierarchy of emanations, evolution causes a dynamic impulse bringing forth creatures with higher and higher forms of generation. Again we find love, this time love for the generation of the Son. Let us look again at the last paragraph of *The Cosmos*.

The term of the divine generation is a Word. We of course see that the mental word which is born in us by the intimate act of our thought is not a child and that its production is not a generation. Indeed, our mental word is not of the substance of our self; there is no similitude of nature. Intelligence in us, as in every intellectual creature, is distinct from our substance, and the mental word is not intelligence itself. If our knowledge of ourselves is in a sense consubstantial, substance is the root of intelligence and intelligence can know substance, yet, intelligence and substance are really distinct.⁴³

⁴¹ SCG IV 11 especially 5-14.

⁴² *The Cosmos*, 332. “il y aura à la fois propagation de nature et identité absolue de nature: la nature s’exprimera dans elle-même. Aussi le Verbe divin renferme-t-il dans sa procession à partir du Père” (*Le Cosmos*, 128-129).

⁴³ *The Cosmos*, 334. “Le terme de la génération divine est un Verbe. Or, nous voyons tout de suite que le verbe mental qui naît en nous de l’acte intime de notre pensée n’est pas un fils et que sa production n’est pas une génération. En effet, notre verbe mental n’est pas de la substance de notre moi: il n’y a pas de similitude de nature. L’intelligence est en nous, comme en toute créature intellectuelle, distincte de notre substance, et le verbe mental n’est pas l’intelligence elle-même. Si notre connaissance de nous-mêmes est en un sens consubstantielle, en effet, la substance est la racine de l’intelligence et l’intelligence peut connaître la substance, pourtant, l’intelligence et la substance sont réellement distinctes” (*Le Cosmos*, 130).

In man there is physical generation as well as the intellectual expression of knowledge. Both are higher than any subhuman generation. Human reproduction is higher because of the dignity of the term, a person, even though it is not an interior emanation. According to De Koninck, human generation or reproductive fruitfulness is always for the sake of spiritual fruitfulness. “Nature tends toward immanent fruitfulness.”⁴⁴ A sign of this is that reproduction will end in heaven, because it will have reached its goal. “For in the resurrection they neither marry nor are given in marriage, but are like angels in heaven” (Mt 22:30). The saints will be giving and receiving love eternally, bearing the fruit of their spousal relationship with Christ.

Evolution not only brings forth a *creature, man*, that is an image like the Image because he has an *intellectual operation* that can image the generation of the Son; it also allows *cosmic history* to mirror the generation of the Son, and thus increases the exemplar causality of the Son in a third way. De Koninck finds an apt quotation of Boethius in the Prima Pars about the world made in the image God: “Boethius says of God: *Mundum mente gerens, similique in imagine formans*. [Carrying the world in his thought, he fashions it to his image].”⁴⁵ Thomas uses the quotation from Boethius in an objection that argues, “The whole universe is an image of God and not only man.”⁴⁶ St. Thomas comments on Boethius: “Boethius here uses the word “image” to express the likeness which the product of an art bears to the artistic plan [*species artis*] which is in the mind of the artist. Thus every creature is an image of the exemplar type which is in the divine mind.”⁴⁷ The cosmos in its history is not, of course, an image of God in the formal specific way that humans are; yet its history bears a likeness to the generation of the Son. Therefore, the

⁴⁴ “Divine Fruitfulness.” “La nature tend vers la fécondité immanente.” (“La Fécondité Divine,” Appendix 3).

⁴⁵ *The Cosmos*, 330; citing *ST I* 93.2 arg 4; which, in turn cites Boethius, *De Consolatione Philosophiae* III, metr.9; “Boèce disait de Dieu: *Mundum mente gerens, similique in imagine formans* – Portant le monde par sa pensée, il le façonne à sa ressemblance et à son image” (*Le Cosmos*, 127).

⁴⁶ *ST I* 93.2 arg 4.

⁴⁷ *ST I* 93.2 ad 4: “Imago accipitur a Boetio secundum rationem similitudinis qua artificiatum imitatur speciem artis quae est in mente artificis, sic autem quaelibet creatura est imago rationis exemplaris quam habet in mente divina.”

cosmos, in its whole historical existence, is also an image, taken in this generic sense, created according to an exemplar spoken in the Word.

Thus the exemplarity of the Son is increased in four ways in the evolving cosmos: 1) The whole cosmos tends toward the Image by the equivocal generations that increase interiority in natural beings until man is reached, who is formally to the image of God; 2) The whole cosmos tends toward the likeness of the Son's generation by producing creatures whose emanations approach closer and closer to the generation of the Son until man is reached who generates both a word in his intellect and another person bodily; and 3) The evolutionary history of the cosmos is itself a likeness of the Son's eternal generation. 4) Indeed, the history of the cosmos actually is the generation of the Son in His human nature.

B. The Holy Spirit

"But also to be found in the cosmos is a trace of the procession of the Holy Spirit, and more particularly in the mutations, which, from the ontological point of view, are brought about by impulse."⁴⁸

In the newly discovered fifth paragraph of the theological section of *The Cosmos*, De Koninck argues that mutations are traces of the procession of the Holy Spirit as natural generations, such as horse generating horse, are traces of the generation of the Son. One can conclude that evolution increases the imprint or exemplar causality of the Holy Spirit in the history of the cosmos.

In natural generation, generators produce offspring like themselves in species. In divine generation, the Father produces the Word by the operation of intellect, and it is peculiar to the operation of intellect to produce a fruit that is a likeness of the thing known. Therefore, the Word is called Son since he proceeds from the Father according to likeness, as animals do in natural

⁴⁸ "Impulse of the Holy Spirit." "Mais il y a aussi dans le cosmos un vestige de la procession du Saint-Esprit et plus spécialement dans les mutations, qui, au point de vue ontologique, sont suscités par impulsion" ("L'Impulsion du Saint-Esprit," Appendix 2).

generation. The procession of the Holy Spirit, on the other hand, is according to the operation of will, which does not produce a fruit that is a likeness of what is loved, but rather an impulse toward it. Since mutations or the equivocal generations that produce mutated progeny do not produce offspring of the same species as their parents, De Koninck argues that they are not traces of the generation of the Son but rather of the procession of the Holy Spirit. “Clearly we find a vestige of this procession by impulse, which is not at all a generation, in the calling forth of new species.”⁴⁹ Each new species is like an impulse of love for the human form, a new approximation approaching the goal of nature. They are petitions for a new nature rather than restatements of an old one. De Koninck uses the image of fuel explosions to capture the dynamic nature of these equivocal generations.

Already the simple observed facts sketch an image of a nature which advances by successive explosions in the manner of a rocket, rising to the sky and asking directly from the hands of the Creator the spiritual form of man to which nature has been destined and in which she is liberated.⁵⁰

The dynamic nature of the mutations is an imprint of the Holy Spirit, who is the dynamic impulse of love between the Father and Son. The mutations are driven or drawn by love for the likeness to the Son, in the form of man, and through man, the mutations return to the principle, the Father.

All infrahuman things thus tend toward God by their tendency toward the human species to which they are immediately ordered and in which the trajectory of their desire is accomplished. They are *love and desire for man* by their very tendency toward the explicit love of God.⁵¹

Cosmic beings that cannot know and love God explicitly are nevertheless love for God by being love for man. They are functional beings; “as individual subjects, they cannot participate in the

⁴⁹ “Impulse of the Holy Spirit.” “Or, manifestement nous trouvons un vestige de cette procession per impulsion qui n’est point une génération, dans la suscitation de nouvelles espèces” (“L’Impulsion du Saint-Esprit,” Appendix 2).

⁵⁰ *The Cosmos*, 254. “déjà les simples faits *constatés* esquissent l’image d’une nature qui s’élance par des explosions successives à la manière d’une fusée jusqu’à toucher le ciel, appelant directement des mains de son Créateur la forme spirituelle de l’homme à laquelle il l’avait destinée et en laquelle elle est libérée” (*Le Cosmos*, 22).

⁵¹ *The Cosmos*, 308. “Toutes les choses infrahumaines tendent ainsi vers Dieu par leur tendance vers l’espèce humaine à laquelle elles sont immédiatement ordonnées et en laquelle la trajectoire de leur désir s’accomplit. Elles sont amour et désir de l’homme par leur tendance même vers l’amour explicite de Dieu” (*Le Cosmos*, 101).

term of their desire.”⁵² They are vessels for the spiritual agent “which is the active principle of the ascent of the world to its goal.”⁵³ There may be one or more angels governing evolution, but if so, they are agents of the Holy Spirit. Evolution takes place by “the impulse of the Holy Spirit.” The impelling efficient force for vivifying and generating is appropriated to the Spirit because He is impulse in God and because that impulse conforms the world to the Spirit. The goal is to increase love in the cosmos until there is a creature capable of consciously loving the creator.

The ascent of life is thus a voluntary movement...The principal goal of this motion is not to make use of the passivity of nature, but *to increase love in it* so that the desire might spring from a more and more profound interiority, proceed more and more from the within of nature by means of knowledge, and that love increase with consciousness, and in it to arrive finally at a love reflected on itself.⁵⁴

It is just toward consubstantial love that the whole universe tends, that is, toward the love of self for itself, not doubtless as ultimate end, but as the pre-condition of the explicit return to the First Principle by love.⁵⁵

The Father and Son cause the ascent of life through Love, who is the Person of the Holy Spirit, in order to increase love in the cosmos until a creature is produced that can consciously love its Creator. The Holy Spirit impels the process of evolution, is an exemplar of the mutations, and is the exemplar of the human love, which is the goal of the process. Thus evolution increases the exemplar causality of the Holy Spirit in the maturation of the cosmos.

4. Some Objections

Let me conclude by addressing four possible objections to De Koninck’s theory of evolution:

1. If the reason for evolution were the manifestation of God’s mercy and the eternal processions, then it should have been clearly revealed in Scripture or in nature. 2. Evolution destroys the

⁵² *The Cosmos*, 308. “En tant que sujets individuels, ils ne peuvent pas participer au terme de leur désir” (*Le Cosmos*, 102).

⁵³ *The Cosmos*, 309. “qui est principe actif de l’ascension du monde vers son terme” (*Le Cosmos*, 103).

⁵⁴ *The Cosmos*, 309; emphasis added. “L’ascension de la vie est ainsi un mouvement volontaire... le but principal de cette motion n’est pas de se servir de la passivité de la nature, mais de faire grandir en elle l’amour afin que le désir jaillisse d’une intériorité de plus en plus profonde, qu’il procède de plus en plus du dedans de la nature au moyen de la connaissance, et que l’amour grandisse avec la conscience, et en elle, pour en arriver enfin à un amour réfléchi de soi” (*Le Cosmos*, 103-104).

⁵⁵ *The Cosmos*, 309. “Et c’est justement vers l’amour consubstantiel que tend l’univers tout entier, c’est-à-dire vers l’amour de soi-même par soi-même, non sans doute comme fin dernière absolue, mais comme condition préalable du retour explicite au Premier Principe par l’amour” (*Le Cosmos*, 103).

Thomistic understanding of eternal essences. 3. Evolution makes essences themselves changeable. 4. Constant divine and angelic interventions make evolution driven by miracles. They make mutations a supernatural phenomenon rather than a natural one.

A. Evolution was not Revealed

(1) Scripture

St. Thomas offers the following argument that theories about the particular events and time sequence of creation should only be considered probable. We cannot believe anything that contradicts Scripture, but since Genesis can be interpreted in different ways, we must be careful not to hold on to an interpretation that is proved false “lest Holy Scripture be exposed to the ridicule of unbelievers, and the path of believing be barred for them.”⁵⁶ The Genesis creation story is a story about the origins of the world that is not intended to be taken as a scientific or literal historical account. It reveals profound theological truths but leaves us free to investigate the past by scientific and historical methods.

St. Augustine was convinced that evolution was revealed in the Genesis account of creation; St. Thomas thinks his interpretation quite possible. De Koninck concurs and quotes two such passages from St Thomas in *The Cosmos*.⁵⁷ One of them is from the Prima Pars:

Augustine (*Gen. ad lit.* v. 5; viii. 3) says that the earth is said to have then produced plants and trees in their causes... And this is confirmed by reason, as follows. In these first days God created all things in their origin or causes... Yet afterwards, by governing His creatures, in the work of propagation, *He works until now* (see Jn 5:17). Now the production of plants from out of the earth is a work of propagation, and therefore they were not produced in act on the third day, but in their causes only.⁵⁸

⁵⁶ ST I 68.1: “Cum Scriptura divina multipliciter exponi possit, quod nulli expositioni aliquis ita praecise inhaereat quod, si certa ratione constiterit hoc esse falsum, quod aliquis sensum Scripturae esse asserere praesumat, ne Scriptura ex hoc ab infidelibus derideatur, et ne eis via credendi praecludatur.”

⁵⁷ *The Cosmos*, 290; 349, footnote 95; *Le Cosmos*, 77-78, footnote 68.

⁵⁸ ST I 69.2: “Augustinus autem, *V Sup. Gen. ad Lit.*, dicit quod causaliter tunc dictum est produxisse terram herbam et lignum, idest producendi accepisse virtutem. Et hoc quidem confirmat auctoritate Scripturae. Dicitur enim Gen. II, istae sunt generationes caeli et terrae, quando creata sunt, in die quo Deus fecit caelum et terram, et omne virgultum agri, antequam oriretur in terra, omnemque herbam regionis, priusquam germinaret. Ante ergo quam orirentur super terram, factae sunt causaliter in terra. Confirmat autem hoc etiam ratione. Quia in illis primis diebus condidit Deus creaturam originaliter vel causaliter, a

Thomas says that God did not create all the species of plants in His original act of creation *ex nihilo*. He created them “in their origin or causes,” namely in the earth from which He later produce them in act by “propagation.” We can easily interpret this propagation to be biogenesis and evolutionary mutations.

(2) Nature

Millions of stars and snowflakes will never be seen; many have only been seen recently. Nonetheless, the lavishness of their number and the “uselessness” of their beauty reveal something about the beauty of God and the gratuitousness of His gifts. In heaven, the full panorama of cosmic history will be revealed. The saints will be able to ponder God’s mercy as revealed in the process of evolution, as well as in the Incarnation and Cross, for all eternity. Gothic cathedrals have intricate details on their ceilings and capitals where no one can see them. The unseen adds depth to the seen. God’s revelation of Himself in creation is richer, deeper, and more intricate than any human manifestation in art. Nature always has more secrets to reveal.

B. Evolution Destroys Eternal Forms.

How can one maintain, with De Koninck, that cosmic beings participate in eternal essences if organisms have undergone millions of transitions to millions of different specific forms, or at least subspecific forms, during the course of evolution? Moreover, according to De Koninck, these forms came about by contingent paths. Very different plants and animals might have evolved had conditions been slightly different on earth.

In answer, we can point out that it is no more difficult for God to speak a billion archetypes than a thousand; He can cause a billion evolutionary transitions as easily as create ten thousand species immediately. In physics and chemistry, the simpler and more elegant model or equation is preferred, yet there has never been a demonstration that nature always chooses the simplest

quo opere postmodum requievit, qui tamen postmodum, secundum administrationem rerum conditarum per opus propagationis, usque modo operatur. Producere autem plantas ex terra, ad opus propagationis pertinet. Non ergo in tertia die productae sunt plantae in actu, sed causaliter tantum.”

means. Life is generous and messy. Oaks produce millions of acorns that will not sprout; fish spawn millions of eggs that will not hatch or that will be eaten soon after they hatch. The multiplicity of transitional kinds called for by the theory of evolution suits the generosity of life as well as their instrumental nature.

Nor is it a difficulty if the genesis of species depends upon which particular path of species preceded them. God can cause natural beings to come into existence by a path that includes natural causes and chance. He can infallibly cause contingent things to come about by contingent causes. Indeed, there is something very fitting in contingent natures, whose existence is purely useful, coming into existence at a particular time and in a particular way by chance and vanishing in the same way, leaving traces of their existence only in the natures that follow them and perhaps in fossils.

The Father has spoken every possible form in the one Word, who is the Image of the divine essence.⁵⁹ Those forms, which God plans to actually bring into existence, are of a definite number, even if it is very large. They are willed and spoken eternally, even if they are willed to come about in a contingent manner in which chance may play a large roll. St. Thomas calls such willed forms *rationes factivae*⁶⁰ or *exemplares*,⁶¹ since they are the plans according to which God brings creatures into existence. Of these *rationes factivae*, some are intelligible and constitute natures, while others govern a wholly accidental configuration of effects, such as a heap of leaves. This doctrine of eternal archetypes is not at all threatened by De Koninck's ontological

⁵⁹ ST I 14.9.

⁶⁰ ST I 34.3: "Et sicut Dei scientia Dei quidem est cognoscitiva tantum, creaturarum autem cognoscitiva et factiva; ita verbum Dei eius quod in Deo patre est, est expressivum tantum, creaturarum vero est expressivum et operativum. Et propter hoc dicitur in Psalmo 32, dixit, et facta sunt; quia in verbo importatur *ratio factiva* eorum quae Deus facit."

⁶¹ ST I 15.3: "Cum ideae a Platone ponerentur principia cognitionis rerum et generationis ipsarum, ad utrumque se habet idea, prout in mente divina ponitur. Et secundum quod est principium factionis rerum, *exemplar* dici potest, et ad practicam cognitionem pertinet. Secundum autem quod principium cognoscitivum est, proprie dicitur ratio; et potest etiam ad scientiam speculativam pertinere. Secundum ergo quod *exemplar* est, secundum hoc se habet ad omnia quae a Deo fiunt secundum aliquod tempus. Secundum vero quod principium cognoscitivum est, se habet ad omnia quae cognoscuntur a Deo, etiam si nullo tempore fiant; et ad omnia quae a Deo cognoscuntur secundum propriam rationem, et secundum quod cognoscuntur ab ipso per modum speculationis."

theory of evolution whatever the number of natural species there have been or however short lived.

Evolution made it possible for there to be more species of living things over time since not all species of animals and plants that have ever existed could have existed at the same time. Nevertheless, these species are not simply dispersed in time because they are united by common descent and a common goal.

C. Evolution Makes Essences Themselves Changeable

A Thomist might also fear that evolution threatens the doctrine of substantial form. Can one really hold on to unchanging essences if organisms continuously change into new organisms? One does not need to give up Thomas's doctrine of matter, form and substantial change even if one posits a multitude of transitional essences. De Koninck does not hold that one kind of thing slowly changes into another kind of thing in evolution, in such a way that one particular form changes into another form. He writes clearly that no form, whether substantial or accidental, can change.

The degree of perfection is determined by form. Under this aspect every form is invariable and immobile, for by definition a form makes a being what it is. If the form changed, and if the form were as such mobile, a being would never be what it is and movement itself would be contradictory. Form is thus the principle of the diversity of movements, without itself being a movement.⁶²

De Koninck is explaining why a form can never change. If all change occurred by the form, itself, changing, the form would have to be a subject because it could only change by losing one form and acquiring another. This would lead to an infinite regress. Change requires an underlying subject that remains and a form that is lost as well as a form that is gained. It is the underlying substance in accidental change or prime matter in substantial change that changes by acquiring a new form.

⁶² *The Cosmos*, 268. "Le degré de perfection est déterminé par la forme. Et sous ce rapport toute forme est invariable et immobile, car par définition une forme constitue un être ce qu'il est. Si la forme changeait, et si la forme était en tant que telle immobile, un être ne serait jamais ce qu'il est et le mouvement même serait contradictoire. La forme est ainsi le principe de la diversité des mouvements, sans être elle-même en mouvement" (*Le Cosmos*, 40).

A substantial form is that principle of being that makes a substance to be at all as well as to be what it is. When the substantial form of a dog, i.e. its soul, vanishes, the dog ceases to exist at all. What was the matter of the dog acquires a new form or forms (of various minerals). Matter cannot exist at all without a substantial form; if it loses one form it must, without any intervening time, acquire another. Matter cannot exist *between forms* as it would were it possible for the substantial form itself to change. Matter is pure potency; it cannot exist without a form actualizing it. It cannot be half actualized like the Cheshire cat in *Alice in Wonderland* that leaves its smile behind when it disappears.

For every substantial change, the matter needs to be made ready in order to bring forth the new form from within itself; it needs shaping or, as De Koninck says, the generating agent “models it.”⁶³ In a series of mutations, the modeling may happen over generations of progeny that are only accidentally different from their parents until the composite whole is enriched to the point of being disposed for the higher form. Nevertheless, each organism must be enlivened by a soul or substantial form of one particular kind. The souls themselves are not in flux; if they were in flux no organism could be alive or exist at all.

De Koninck holds that one kind of organism generates another kind of organism as an instrument of a higher cause, rather than that one kind of organism changes into another kind of organism. However, even if mutations did occur by radiation or some other cosmic force altering an organism until it changed into another kind of organism, one substantial form would not change into another. Rather the organism itself would undergo a substantial change; it would lose one substantial form and gain another as if it had died. Indeed it would have died, although there would be no corpse. The original organism would undergo alterations until it was no longer fit for its soul and then an abrupt ontological (or substantial) change would occur as it acquired a new kind of soul.

⁶³ *The Cosmos*, 282; “il le modèle.” *Le Cosmos*, 63.

We do not commonly see animals or plants change ontologically directly from one kind of organism to another. When plants and animals die, they become corpses and corrupt into nonliving minerals, before they become part of other organisms. Even when living things are eaten alive, they are reduced to nonliving matter before they are digested and become part of the flesh of a new organism. However, De Koninck does discuss one case we can observe of a living thing changing immediately into another or rather into two other living things, namely, prokaryotic reproduction by cell division.

The unicellular living thing does not divide into two parts: it gives birth to two new individuals, and their birth is its death. The very fight to preserve life involves death.⁶⁴

De Koninck interprets prokaryotic reproduction as sacrifice: When a bacteria reproduces by dividing in two, the parent cell dies in order to give life to two new daughter cells. There is an ontological change in which one organism becomes two new organisms without an intermediate stage of corruption to the inorganic. One organism loses its soul and its life; its underlying matter immediately acquires two new souls and becomes two new organisms of the same kind as the parent cell.

No matter how many millions of transitional organisms are called for by the theory of evolution, each must have been of a determinate kind at every instant of its life. It may have changed gradually in accidental ways but it could only become a new kind of species by an abrupt substantial or ontological change by losing one substantial form and gaining another, that is itself unchanging. Substantial forms can only exist as a principle of a composite or not exist at all. They cannot change or partially exist and gradually increase in a composite the way a body can become hotter or colder or redder or blacker.

⁶⁴ *The Cosmos*, 301 “Le vivant unicellulaire ne se scinde pas en deux parties: il donne naissance à deux individus nouveaux ; et leur naissance même est sa mort. La seule lutte pour conserver la vie entraîne déjà la mort” (*Le Cosmos*, 93).

D. Constant Divine Interventions Make Evolution Supernatural.

Evolution makes nature unnatural. Millions of evolutionary transitions would mean, according to De Koninck, that God and angels are constantly intervening into the workings of nature, causing natural generation to become the equivocal generation of a mutated progeny.

De Koninck sees no miraculous intrusion in mutations. He sees an intimate involvement of God and angels in all cosmic activity even if there were no evolutionary mutations. Not a rock falls or a moon revolves around a planet without spiritual pressure. Dog cannot generate dog; nor acorns develop into oaks without a constant influx of spiritual power. Evolution does not mean that God and angels are more involved in mutations than they would be if there were only univocal generations. God is always completely involved in every generation. The first cause is always more responsible for any effect than the inferior causes. The generators are less perfectly causes of the effect since they are only instruments for generating the higher organism. Nevertheless, nature as a whole has more causality in producing the multitude of species that have evolved and in particular in causing the genesis of man than it would have had if all the species including man had been created by distinct immediate acts of creation. Natural beings are instrumental causes of the evolution of all the species of plants and animals including man; they could have had no part in the immediate creation of distinct species.

CONCLUSION

1. Results Reached in Chapter Seven

I have argued that an evolving cosmos manifests God's glory better than a static universe in many ways. Evolution increases the mercy shown in the Incarnation because God unites Himself to a lower nature, a nature descended even from one-celled plants; He gives all the organisms in His line of descent the honor to be ancestors (in an analogous sense) to God. He gives the cosmos the good of mirroring the eternal generation of the Son in its history. Indeed, the Father causes the cosmos to become like the womb of His Son. The evolution of the cosmos is the temporal generation of the Son completed in the womb of Mary. Evolution gives us a new lens with which to understand the cosmic texts about Christ in Scripture. The cosmos is for Christ because it is the womb of His developing body. Its supreme meaning lies in its order toward bringing forth Christ, head and body and serving Christ, head and body. Christ unites all things in the cosmos with all things in heaven through His blood.

Evolution increases the imprint of the Trinity on the cosmos because it perfects the Trinitarian unity of order in the cosmos. This is the circular order of the processions. The Son comes forth from the Father and returns to Him in the Love that is the Holy Spirit. By evolution, the Son comes forth over the eons from the cosmos and then brings it back to the Father by the power of the Holy Spirit, in Himself and in its principal parts, the saints. Moreover, just as the three divine persons are one by the harmony of love as well as by essence, evolution unites all the billions of parts of the cosmos by the harmony of love. God places natural love for the form of

man in every cosmic being. He draws everything toward producing man, so that man can return the cosmos to God in knowledge and love.

Evolution increases sacrifice and gift-of-self in the cosmos. The equivocal generations that bring about evolution are a flood of gifts-of-self. They are caused by love for the only cosmic being that can consciously give himself back to the creator, humanity.

Evolution also increases the exemplarity of the divine processions in the cosmos. The Son is the exemplar cause of the whole process of evolution because it imitates His eternal generation. He is also the exemplar of man, made in the image of God, who is its goal. The Holy Spirit is the exemplar cause of the mutations because they are caused by an impulse of love for the human form and the Holy Spirit is personal Love. The Father and Son cause the ascent of life through the Love that is the Holy Spirit, in order to increase love in the cosmos until a creature is produced that can consciously love its Creator.

We are very far from struggling to find some space left for the creator in the process of evolution. On the contrary, an evolving cosmos manifests God's glory in many ways better than a static cosmos. It manifests His mercy, the circular order and gift-of-self of the Trinity more perfectly. It increases the causality of the Trinitarian processions in the maturation of the cosmos. It intensifies the unity of the cosmos by increasing the harmony of love. These theses can be seen as implicit in De Koninck, if one reads *The Cosmos* in light of *Ego Sapientia*.

2. Critique

Many aspects of De Koninck's doctrine on evolution are opinions rather than firm conclusions from certain principles. Universal common descent remains a theory, supported by many observations but also called into question by many observations. The corollaries I have drawn are even more tentative. I question a number of De Koninck's opinions, yet I find speculations about evolution vitally important. Theology and philosophy cannot abdicate from the

realm of nature and leave it solely to the province of a mechanistic science that interests itself only in what can be described by equations and models. Since nature has been left the province of a reductionist science, it is thought by most educated men that there is no objective beauty, goodness, or purpose in nature. The transcendentalists have been relegated to the sphere of values and assumed to be completely subjective. Nature is no longer able to ground morality or natural theology.

I admire De Koninck for the vitality of his philosophical and theological life. He ponders the theological significance of the expansion of the universe and evolution. Inevitably, he makes hazardous conjectures. Among many possible doubts or difficulties, I would like to present two difficulties that I find with his doctrine. First, I disagree that there are only four natural species, if this is taken to be his doctrine. Second, I doubt that evolution continues after the advent of man. I find De Koninck very unclear about the relationship between cultural evolution, including the growth of scientific knowledge and technology, and the growth of the Church as goals of evolution.

A. Four Species

I noted that De Koninck seems to claim that there are only four natural species: inorganic, plant, animal and human. “These four species are the only ones philosophically definable. The canine species is not a species in the philosophical sense.”⁶⁵ In *The Cosmos*, he also says, “The fixity of subhuman forms is therefore a counterfeit fixity.”⁶⁶

In *The Principle of the New Order*, he calls subhuman species “whirls in the flux.” “The attempt to see the entire cosmos as a great flow, as an immense torrent arising always from a

⁶⁵ Ces quatre espèces sont les seules qui soient philosophiquement définissables” (*Le Cosmos*, 27).

⁶⁶ *The Cosmos*, 167. “La fixité des formes infrahumaines n’est donc qu’une fixité contrefaite” (*Le Cosmos*, 39).

unique logos, from a first reason where *natures are like whirls in the flux*, is very laudable.”⁶⁷

Lawrence Dewan comments on the changeable character of cosmic beings for De Koninck: “Fr. Owens conceives of the substantial being of movable things as intrinsically a ‘flux,’ ignoring the *per accidens* aspect of such being’s being measured by time. Charles De Koninck strikes me as tending in this same direction.”⁶⁸

In *The Problem of Indeterminism*, De Koninck calls natural species “zones of probability.”

A non-subsisting form is not a quiddity in the strict sense. That is to say that the different sub-species, the species of dog, the species of elephant, cannot be absolutely opposed as are the species-individuals which are the pure spirits...

Natural species should be conceived as zones of probability. No given natural and individual form is an absolute type of a subspecies, nor any sub-species of its natural species. The dog, the carrot, are statistical entities like the French and the English. None of the elements exhausts the essence of its class.⁶⁹

De Koninck sees correctly that natural forms are not completely determined. Dogs can be tall or short, black or white, blue-eyed or brown-eyed. No one individual in a natural species can embody all the possibilities for that species. Nor can various plant or animal species be opposed to each other by possessing or not possessing one specific difference the way the genera plant and animal can be opposed by the possession or lack of sensitive power. However, there is a certain limited range of variation or “zone of probability” in physical characteristics and intelligence or cogitative power in each species. A mouse may weigh anything between 10 to 25 grams, but no mouse weighs as much as an elephant. Individual mice may be more or less capable of learning the path through a maze, but no mouse can solve a crossword puzzle. The lack of *complete* determination in the properties of species of plants and animals does not seem sufficient to argue

⁶⁷ *The Principle of the New Order*, 144. “la tentative de voir le cosmos tout entier comme une grande coulée, comme un immense torrent débordant continûment d’un logos unique, d’une raison première, et où les natures sont comme des tourbillons du flux, est très louable” (*Le principe de l’ordre nouveau*, 198)

⁶⁸ Dewan 2006, 113.

⁶⁹ “The Problem of Indeterminism,” 381. “Une forme nonsubsistante n’est pas une quiddité au sens strict. C’est dire que les différentes sous-espèces, telles l’espèce canine et celle de l’éléphant, ne peuvent être absolument opposées comme les espèces-individus que sont les esprits purs... Les espèces naturelles doivent être conçues comme des zones de probabilité. Aucune forme naturelle et individuelle donnée n’est type absolu d’une sous-espèce, ni aucune sous-espèce de son espèce naturelle. ‘Le chien’, ‘La carotte’, sont des entités statistiques comme ‘Le français’ ou ‘L’anglais’. Aucun des éléments n’épuise l’essence de sa classe” (“Le problème de l’indéterminisme,” 329-330).

against the existence of different species altogether, although, it does make them more difficult to recognize.

I argued in the section of individual and species that the best reading of De Koninck is to take him to mean that species is said analogously of natural species because their essences have less necessity, less unity, and less intelligibility than those of spirits. He wishes to signify this by usually calling them subspecies. Nevertheless, they do differ formally and so do constitute formally different species. However, a reader might be forgiven for taking De Koninck seriously when he states his claims about plants and animals most forcefully such as in the last passage, “The dog, the carrot, are statistical entities like the French and the English.”⁷⁰ It sounds as though he is saying that the dog is no more a species of animal than the French are a species of human.

Perhaps the strongest passage in this direction is his comparison of embryonic development to evolution. As we saw, De Koninck says that organisms follow the path that St. Thomas thought a fetus follows in acquiring first a nutritive soul, then a sensitive soul, and finally a rational soul. However, St. Thomas would not say that the embryo is a determinate species of plant or animal as it develops. The souls it acquires are life principles in service of human life. (To the extent that ovum and sperm are alive, he would hold something similar about their principles of life.) If this were applied unequivocally to evolution, one would have to say that organisms are animated by souls that do not make them a definitive species of plant or animal but only a nutritive or sensitive being in service of human life. I think this goes too far. I also don’t think this is the best reading of De Koninck, but it does fit with some of the passages we have looked at that he has written. It also fits with his doctrine that subhuman species have a natural desire for the human form.

Every natural form tends toward man. The idea of man bursts forth from no matter what form, even from a material point of view. The essential desire of prime matter, which always indefinitely exceeds any form received, is to be actuated by the immobile form of man. Sub-human forms are much less states than tendencies.⁷¹

⁷⁰ “The Problem of Indeterminism,” 381. “‘Le chien’, ‘La carotte’, sont des entités statistiques comme ‘Le français’ ou ‘L’anglais’.” (“Le problème de l’indéterminisme,” 329-330).

⁷¹ *The Cosmos*, 266 “Toute forme naturelle est tendu homme. L’idée de l’homme jaillit de n’importe quelle forme, voire, d’un point matériel. Le désir essentiel de la matière première, qui déborde toujours

The last sentence, “Sub-human forms are much less states than tendencies,” presses the analogy to embryonic forms very hard. One might take this to mean that inorganic bodies are “towards plant tendencies,” plants are “toward animal tendencies,” and “animals are “toward humans tendencies.”

Indeed, some interpreters have taken De Koninck to be positing that there are only four natural species, simply speaking. For example, Mark Ryland writes:

A number of modern natural philosophers have at least toyed with the following idea: suppose that, contrary to common sense, there are only three essences of things in the living world: plant essence (nutritive soul), animal essence (sensitive soul), and human essence (rational soul). According to this view, all differences among plants are only accidental differences and all differences among animals are only accidental differences. Charles De Koninck, for example, advanced this idea early in his career in a book entitled [*The Cosmos*].⁷²

Ryland believes that De Koninck posits only three species of organisms in order to lessen the number of ontological transitions that must be accounted for in evolution.

Although I think this is not the best reading of De Koninck, I still wish to argue against the position that there are only four natural species since it is a possible reading of De Koninck and one that has, in fact, been taken.

(1) Contrary to Common Experience and Language

It is contrary to experience to affirm that there are only accidental differences between all animals. Surely, worms and elephants are different species of animals. It is true that we cannot define their specific differences. Indeed, scientists do not agree among themselves about what constitutes a species. Many biologists use the term species to refer to communities of reproductively isolated organisms.⁷³ By species, they do not mean a shared nature, but an actual group of plants or animals that have the same or almost the same genetic code and can interbreed.

indéfiniment toute forme reçue, est d'être actée par la forme immobile de l'homme. Et dans cette perspective, les formes infrahumaines sont beaucoup moins des états que des tendances.”

⁷² Ryland, “Applying Natural Philosophy,” 44.

⁷³ For a discussion of species in contemporary biology, see Antonio Moreno, “Some Philosophical Considerations on Biological Evolution,” *Thomist* 37 (1973): 422-223; and Michael J. Dodds, *Unlocking Divine Action: Contemporary Science and Thomas Aquinas* (Washington D.C, Catholic University of America Press, 2012), 80-82.

The scientific classification is merely a nominalist convenience. While interbreeding may be a sign of a shared nature, it is certainly not a defining characteristic. We cannot even discover the specific differences of classes like fish, amphibians, reptiles, birds, mammals, and insects; we can only list their proper accidents. Still I believe that they are essentially different. Otherwise we would have to abandon common experience and the wisdom that is contained in our everyday language about animals. Our first notion of species comes from looking at and naming different *kinds* of animals. “The Lord God formed every beast of the field and every bird of the air, and brought them to the man to see what he would call them; and whatever the man called every living creature, that was its name” (Gen 2:19).

(2) Belittles the Body and Sensible Knowledge

The doctrine that there are only four natural species belittles the importance of body and sensible forms. The vast differences in appearance between worms and elephants or clams and giraffes would be nothing but masks for variations of the same species. An animal with only the sense of touch would be essentially the same as an animal with five senses, a strongly developed inner life, and instincts. However, the cosmos exists to reveal God’s glory to humans, and nothing can manifest God to humans unless we can meet it with our senses. Therefore, the appearances of plants and animals are important; the sensible form manifests the substantial form. John Paul II speaks of the revelatory nature of body in general and then the human body in particular.

The body, in fact, and only the body, is capable of making visible what is invisible: the spiritual and the divine. It has been created to transfer into the visible reality of the world the mystery hidden from eternity in God, and thus to be a sign of it (TOB 19:3-4).

The pope insists that the body is created to make the invisible mystery of God visible. Therefore what bodies look like is significant.

Various kinds of plants and animals differ in their appearances from one another. These differences are not unconnected to their essence; they manifest natural hierarchy. Organisms have a center with a more or less developed inner life, from which they relate to the world, and they

have an outside form in which they display themselves. There is a correspondence between the nobility of an organism's inner life and the outer form and activities in which they display themselves.

Swiss Zoologist Adolf Portmann writes of the correspondence between animal form and hierarchy in *Animals Forms and Patterns*. Portmann's first observation is that lower animals have no head. No sponge, starfish, or jellyfish has a head. Many of the invertebrate phyla have no heads, whereas all of the vertebrates have heads. Thus to have a head at all is already a characteristic of higher animals. It requires the concentration of the higher sense organs, the brain, and the mouth all at one pole of the body. It is the outward sign of a unified inner center of life, which controls nutrition, sensation, and locomotion.

As one proceeds from lower ranked animals to higher, the head becomes more and more distinct. Fish have a smooth streamlined form of body, which includes the head. Birds and mammals have much more distinct heads. But even among them, one finds a similar distinction between the forms of lower and higher ranked birds or mammals. Mammals of lower intelligence such as mice also show a streamlined form of body. As one proceeds to animals of a higher rank, the head becomes more and more set off from the body. Higher mammals have a neck; they may have antlers, manes, or stripes, which accentuate their head pole.⁷⁴ Bodily differences correspond to a hierarchy among animals and demonstrate generic and specific differences. Animals that look completely different are different in kind.

(3) Doctrine of St. Thomas

St. Thomas clearly thinks there are various species of irrational animals, even though we cannot define them. He uses the conclusion that all irrational animals are of the same species in a *reductio ad absurdum* to prove that difference and genus are not themselves natures.

Difference is nobler than genus, as the determined to the undetermined, and the proper to the

⁷⁴ Adolf Portmann, *Animal Forms and Patterns: A Study of the Appearance of Animals*, trans. Hella Czech (New York: Schocken Books, 1967), 68-86.

common, but not as one nature is nobler than another, otherwise it would be necessary that all irrational animals be of the same species; or that there should be in them some form which is higher than the sensible soul. *Therefore irrational animals differ in species according to the variously determined degrees of sensitive nature*; and in like manner all the angels differ in species according to the diverse degrees of intellectual nature.⁷⁵

Aquinas argues that if the difference *irrational* were a nobler nature than the genus *animal*, it would follow either that all animals would belong to the same species or there would be a further form determining each species of animal. Both of which he implies are clearly false. Instead, St. Thomas compares the different species of irrational animals to the different species of angels. He says that the various species of irrational animals differ according to their difference in sensitive power as the angels differ according to their power of intelligence.

We are far from understanding what constitutes a plant or animal species. Modern taxonomists call varieties of animals or plants *species* when they are reproductively isolated even if they differ in only one visible but seemingly peripheral trait such as color in flowers, pattern of stripes in zebras, or color and size of beak in toucans. It seems better to call these different kinds of organisms *varieties*, since they do not seem to possess the kind of difference in their vegetative or sensitive powers that would make a new species.

According to St. Thomas, each distinct animal species must have some difference in its ability to sense, remember or learn. Worms and elephants certainly differ in sensitive power. Worms have only the sense of touch; elephants have five senses, memory, locomotion, many instincts and much spontaneity in behavior. By St. Thomas's criterion, it seems easy to maintain that worms and elephants belong to different species. The tremendous difference in their forms suits the different degree of perfection of their species. Worms have no heads, which seems appropriate for an animal with so little consciousness; elephants have very distinct heads with its characteristic trunk and enormous ears, which seems suitable for such an intelligent animal.

⁷⁵ *ST I 50.4 ad 1*: "Differentia est nobilior genere, sicut determinatum indeterminato et proprium communi; non autem sicut alia et alia natura. Alioquin oporteret quod omnia animalia irrationalia essent unius speciei; vel quod esset in eis aliqua alia perfectior forma quam anima sensibilis. Differunt ergo speciei animalia irrationalia secundum diversos gradus determinatos naturae sensitivae. Et similiter omnes Angeli differunt specie secundum diversos gradus naturae intellectivae."

Lions and tigers, on the other hand, present a more difficult case. If they differ specifically, by St. Thomas's criterion, then one species must have a more perfect sensitive power than the other. This is not evident to a layman. It may be that the rich dissimilarities in their appearance are no more marks of specific difference than those of a blond Swede from a black Nubian.

Thus it is not always clear when different features indicate essential differences or only variations, but an investigation of this problem would be important to develop De Koninck's thought. The characteristics of the indefinite number of possible organic forms also call for more reflection. There may be constraints that limit the possibilities like beauty and harmony with other living forms, besides stability and survival value, which should be investigated by biologists as well as philosophers. Adolf Portmann discovered that headless mammals and birds are not real possibilities; their high rank in the hierarchy of animals excludes the possibility of such a primitive form.⁷⁶ There are doubtless many other principles governing organic forms and functions that scientists could discover if they were interested in pursuing such questions. Such investigations of form, meaning, and end would add tremendous depth to biology, making it much more apt to be the handmaid of wisdom.

To conclude, if De Koninck truly wishes to maintain that there are only four natural species, he would be taken a position contrary to our common experience and way of speaking about plants and animals; we call them by different names because we think they are different kinds of beings. He would be belittling the importance of the body and sensible knowledge. A huge realm of the sensible world would be deceptive, since things that look very different would be essentially the same. Scientists could attain very little certain knowledge about living things if even their classification into kinds reached only accidental differences.

Nor need De Koninck make such an implausible claim. The doctrine of the eternal archetypes spoken in the Word does not require it. Nor does the doctrine of substantial forms that participate in the archetypes and both make organisms to be alive and to be what they are demand it. Neither

⁷⁶ Portmann, *Animal Forms*, 68-86.

doctrine is refuted by a multitude of evolutionary transitions to millions of different species or “fleeting forms”⁷⁷ that come in and out of existence during cosmic history. Moreover, De Koninck sees an intimate involvement of God and angels in all cosmic activity even if there were no evolutionary mutations to be caused. More species does not mean that God and angels are more involved in evolution than they would be if there were only four species. There would be more effects because there would be more transitions but God is always completely involved in every generation. The first cause is always more responsible for any effect than the secondary causes.⁷⁸

B. Cultural Evolution

A second difficulty I find with De Koninck’s theory is his doctrine that evolution continues after humans evolve. De Koninck claims in *The Cosmos* that human culture evolves to produce higher and higher levels.

Tragedy is essential to cosmic life. The desire to reach man (and in humanity the desire to attain always higher cultural levels) knows no pity. To the degree that life becomes more noble and more intense in organization, death becomes more terrible and the fear of death becomes more terrible and the fear of death takes on the most frightening proportions.⁷⁹

The cosmic desire for humanity is not satisfied by the advent of the first humans, according to De Koninck. It is transferred to humans who are always longing for higher cultural levels. Every culture experiences the tragedy of seeing its death, as a new culture arises from its ashes, just as lower organisms experience the tragedy of going extinct as new organisms develop from them. The higher the culture, the more painful is the experience of its death. Nevertheless, this tragedy is necessary so that human culture can evolve.

There are also passages about cultural evolution in De Koninck’s *Course Notes on Nietzsche*.

We have a doctrine of recurrence: but our recurrence is not homogenous and linear: it is spiroidal.

⁷⁷ *The Cosmos*, 301. “formes fuyantes” (*Le Cosmos*, 39).

⁷⁸ See the first proposition of the *Liber de Causis* and St. Thomas’ commentary, beginning of *lectio* 1.

⁷⁹ *The Cosmos*, 301. “Le tragique est essentiel à la vie cosmique. Le désir d’en arriver à l’homme (et dans l’humanité le désir d’atteindre des niveaux culturels toujours plus élevés) ne connaît pas la pitié. À mesure que la vie devient plus noble et plus intense en organisation, la mort devient plus terrible, et la crainte de la mort prend des proportions de plus en plus épouvantables” (*Le Cosmos*, 93).

The historic rhythm follows an ascensional movement: that is to say that the summit of each cycle is more and more elevated. This rhythm is essential to nature, one finds it again in the doctrine of generation and corruption. There is generation and corruption in the concrete life of human culture. And grace does not destroy this rhythm. This rhythm serves the integral order. It attains even the theologians.

Most Christians have a monstrous idea of history. The summit of history would be in the past, and the world would be henceforth in a state of degeneracy. We descend henceforth into hell. But this is what the mass of old people have said since the beginning of humanity. This lazy idea, defeatist and morbid, is, for a Thomist, Manichean and subtly blasphemous. Corruptions are for generation, and when there are no more generations, there will be no more corruption. And this world here below will be assumed in the resurrection. The world only achieves itself at the summit, and its achievement will be an assumption.⁸⁰

De Koninck criticizes Christians who see the summit of history in the past. He insists that there is ascension in history; even if there are spirals down in culture and philosophy, the next peak will be higher. Human culture will continue to progress until the end of the world. He gives as an example three waves in philosophy: the first was Socrates, Plato and Aristotle; the second was Plotinus, Augustine, and Dionysius; and the third was St. Albert and St. Thomas.⁸¹

There is likewise a positive judgment about technological progress in De Koninck because it leads to increased knowledge of the cosmos. He has a passionate desire for knowledge about nature because he wishes to unite all the myriad natural beings in the cosmos in contemplation.⁸²

⁸⁰ *Course Notes on Nietzsche*. “Nous aussi, nous avons une doctrine de la récurrence: mais notre récurrence n’est pas homogène et linéaire: elle est spiroïdale. Le rythme historique suit une mouvement ascensionnel: c’est à dire que le sommet de chaque cycle est de plus en plus élevé. Ce rythme est essentiel à la nature, on le retrouve dans la doctrine de la génération et de la corruption. Il y a génération et corruption dans la vie concrète de la culture humaine. Et la grâce ne détruit pas ce rythme. Ce rythme sert l’ordre intégral. Il atteint même les théologiens.

La plupart des chrétiens ont une idée monstrueuse de l’histoire. Le sommet de l’histoire serait du passé, et le monde serait dorénavant en état de dégénérescence: nous descendons désormais aux enfers. Mais la masse des vieillards ont dit cela depuis le commencement de l’humanité. Cette idée paresseuse, défaitiste et morbide, est pour un thomiste, manichéenne et subtilement blasphématoire. Les corruptions sont pour la génération: et quand il n’y aura plus de générations, il y n’aura plus de corruption. Et ce bas monde même sera assumé dans la résurrection.

Le monde ne s’achèvera qu’au sommet, et son achèvement sera une assomption.” (*Course sur Nietzsche*, Lecture 4, pp. 8-9).

⁸¹ *Course Notes on Nietzsche*. (*Course sur Nietzsche*, Lecture 4, p. 8).

⁸² *The Cosmos*, 302. “He uses the resources of his art to draw to himself all the richness of the world diffused in space and time. the progress of navigation and aviation, the perfecting of telescopes, and the means of long distance communication supplied by modern technology are conquests for intelligence. The ultimate end of these emancipations is not control or the shipping of beans and bananas, nor weather prediction; it is more profoundly the exploration of the world with an eye to gathering it to a point, and contemplation;” “Il emploie les ressources de l’art pour tirer à soi tout la richesse du monde diffuse dans l’espace et dans le temps. Les progrès de la navigation et de l’aviation, le perfectionnement les télescopes et des moyens de communication à distance que permet la technique moderne sont des conquêtes pour

De Koninck suggests in one fragment in the archives that the peak of evolution is reached when man understands evolution. De Koninck writes that the learned man who discovers the method nature has used in producing man through evolution and teaches this knowledge is playing “the greatest role of government that a creature can play.”⁸³ De Koninck is using “government” broadly to mean “leading things to their end” as St. Thomas does.⁸⁴ The wise man “remakes the universe intelligibly”⁸⁵ when he reconstructs the path followed from primitive matter to intelligence. He returns the cosmos to God through his own mind when he understands its circular journey out from God in creation and back to God in the development of human intelligence; he leads other men to their end when he teaches them cosmic history and thereby returns the cosmos to God through his students.

I find this optimism in the continual progress of mankind problematic. The infinite desires of the human heart will never be satisfied by participating in any human culture, but only by union with God in the New Jerusalem. Therefore, there is surely a desire for a higher culture in every human being. Everyone longs for a more just society, for less poverty, disease, and suffering of all kind. Men thirst for more beauty and more truth. No human society will satisfy these desires, so they may work to improve their culture and society in some way. However, there are certainly many reasons to doubt that human culture has made continual progress. We take some steps forward in one area, while we fall massively behind in another. Plumbing is better, but architecture is worse.

l'intelligence . La fin ultime de ces affranchissements, ce n'est pas la commande ou le transport de haricots et de bananes, ni la prédiction de temps pluvieux, c'est profondément l'exploration du monde en vue de le ramasser en un point, et la contemplation.” (*Le Cosmos*, 94).

⁸³ “Why Is Intelligence Necessary in God’s Creation?” Charles De Koninck Archive, Folder 28: Part 5, p.5. “ Evolution, fonction du gouvernement divin, ex parte naturae; mais aussi ex parte intellectus nostri, pour autant que l’on parvient a connaître la manière dont la nature procède vers l’intelligence ; et encore, dans l’enseignement de ce que l’on parvient a connaître de cette manière. Car le savant, dans sa tentative de connaître, poursuit, a un niveau supère ce que la nature a fait a son niveau ; et, en communiquant son savoir, *il joue le plus grand rôle de gouvernement que la créature puisse jouer.* ”

⁸⁴ ST I 103.1: “Res naturales dirigerentur ad finem boni, quod est gubernare.”

⁸⁵ “Why Is Intelligence Necessary” “Sic, intelligence refait intelligiblement l’univers. ”

Philosophic wisdom and artistic production differ from technological mastery, which can progress steadily because it can begin where the previous generation left off and build upon it. Both history and Scripture lead us to doubt continual human progress. The summit of evolution is not the evolutionary biologist but the saint.

(1) The Nature of Wisdom and Art

Wisdom and art could never develop in a smooth curve since contemplation of truth or beauty requires a grasp of the whole and the Mystery behind the whole that requires the entire life of a man. Although a disciple may receive a tradition of wisdom or artistic skills, each disciple, in order to become a master himself, must think through the whole again to its principles and each artist must grasp an aspect of Beauty for himself. This is not to say that there has been no development in wisdom or art. Masters do teach their disciples and disciples can pursue particular lines of thought further than their masters. De Koninck points to a development in philosophy from Plato to St. Thomas;⁸⁶ however, it would require a superbly educated saintly genius in every generation to produce a continuous progress in philosophy and theology.

Architecture, music, and painting progressed for many centuries. Architecture progressed from the tents of nomads at the time of Abraham to medieval cathedrals; music progressed from simple melodies to Venetian polyphony and Mozart opera; schools of painting progressed from flat painting to a more and more perfect mastery of perspective. However, it seems that schools of architecture, music, and painting change not only because they build upon previous schools but also because no one school can exhaust the plenitude of beauty reflected in nature. After a certain level of technical mastery in an art is developed, schools seem to change simply to be different, to capture another aspect of beauty, rather than because they continually progress.

⁸⁶ *Course Notes on Nietzsche. (Course sur Nietzsche, Lecture 2, p. 1).*

(2) History

While we have done much to conquer hunger and disease and to discover and spread scientific knowledge, the history of the last century does not make one optimistic about humanity's steady cultural progress. There has not been steady development from 2000 B.C. till 2000 A.D. toward justice and peace over the whole globe. The two world wars, the violence of the Third Reich and the communist regimes are hardly causes for optimism. Our age is a time of exhaustion and decadence in the arts and philosophy. Postmodernism dominates the arts. Scientists claim to take the place of philosophers in asking and answering the ultimate questions; their answers are often less reasonable than those of the pre-Socratics.⁸⁷ Many of our politicians could have stepped right out of Plato's *Dialogues*. They are venal self-serving demagogues. Others are convinced ideologues that wish to use their power to change the nature of man, marriage, the family, and the state. Many wish to remove any mention of God from the public arena.

(3) Scripture

The book of Revelation presents a view of history that does not lend itself to the interpretation of history as cultural progress. There seems rather to be an increasing rift between good and evil. Catastrophe follows upon catastrophe like the plagues in Exodus. Satan achieves more and more earthly power until the only choice is martyrdom or apostasy to the side of the Antichrist. Babylon is the queen city of a World State "which has dominion over the kings of the earth" (Rev 17:18). There is a life of luxury for its citizens who are "clothed in fine linen, in purple and scarlet, adorned with gold, with jewels, and with pearls" (Rev 18:16). But this luxury

⁸⁷ See, for example, Steven Hawking's explanation of the origin of being. "M-theory is the only candidate for a complete theory of the universe. If it is finite—and this has yet to be proved—it will be a model of a universe that creates itself. We must be part of this universe, because there is no other consistent model." Stephen Hawking and Leonard Mlodinow, *The Grand Design* (New York: Bantam Books, 2010), 181.

and power over the nations is bought at the expense of becoming “the dwelling place of demons” (Rev 18:2), “for her sins are heaped high as heaven”(Rev 18:5).

Pieper speaks of a “pseudo-order” described in Scripture in the End Time:

At the end of history there will be a pseudo-order maintained in being by the exercise of power...The notion of a purely organizational social integument, in which everything ‘technological’, from the production of goods to hygiene, ‘functions smoothly’, and which is nevertheless fundamentally a phenomenon of disorder, is not very remote from contemporary experience.⁸⁸

Pieper says that the pseudo-order will provide goods and comforts, while maintaining an order based on misuse of power. We do indeed have a smooth functioning technological society today. We can produce enough food for everyone in the world although wars and greed prevent it from reaching everyone. It has never been so easy to communicate so fast to the whole world, but it hasn’t necessary led to wisdom being communicated. The Internet is used to diffuse pornography, advertisements, and trite networking at least as much as worthy knowledge or beauty.

(4) *The Saints*

The saints are the summits among humanity; they govern evolution most profoundly by bringing it most perfectly back to God through their knowledge and love. They also govern by evangelizing and bringing others back to God. Since the greatest of all saints is Mary who lived 2000 years ago, we cannot say that there has been progress in sanctity.

Unfortunately, there does not seem to be a correlation between knowledge of evolution and sanctity. The kind of knowledge of nature needed to bear the scientist towards the creator is not the mechanistic science common today. At least, it frequently does not have that effect but rather the opposite. An increase of scientific knowledge of the cosmos is a good thing and technological progress leads to many good things, like reducing starvation and disease, but does not necessarily lead to progress in the most important thing: the spread of wisdom, charity and incorporation into Christ. We see technology functioning smoothly in abortion, euthanasia, and *in vitro* fertilization.

⁸⁸ Josef Pieper, *The End of Time; A Meditation on the Philosophy of History* (New York: Pantheon Books, Inc., 1954) 120.

If the kind of knowledge that is pursued is limited to the quantitative aspect of nature, especially the aspects that increase human control of nature, the good and the beautiful recede into the realm of purely subjective values. Mathematical and mechanical knowledge can never ground morality or metaphysics. The good has no place in mathematics. If formal and final causes are left out, then nature can no longer speak to us about God. Classical mechanics, quantum mechanics, and nuclear biology all study nature as a branch of mechanics. Humans are understood as molecular or nuclear machines.

One might wonder whether pursuing the kind of knowledge that leads to technological progress tends to eliminate the pursuit of other kinds of knowledge that are more valuable. It is certainly a marvelous thing to know about the age and distance of billions of stars and the molecular mechanism of inheritance, but if in pursuing such questions one loses interest in the ground of being of stars and animals and the difference between living and non-living then it seems that one cannot talk about a general progress of human knowledge.

De Koninck certainly understands the dangers of scientific reductionism and coins the brilliant phrase, “The Hollow Universe,”⁸⁹ for what is left of nature when science is reduced to mechanics. Nevertheless, one detects in his vision of cultural evolution, an idea of natural progress that is worrisome. Even on the natural level, mechanistic knowledge about the cosmos is not progress unless it is accompanied and interpreted by the wisdom of perennial philosophy. Aristotle did not know about DNA, but he knew that reproduction was for the sake of achieving immortality through the species that was an imitation of the divine.⁹⁰ He understood life and reproduction more profoundly than contemporary scientists who understand the genetic mechanism for inheritance, but believe that reproduction is nothing but the transfer of chemical

⁸⁹ Charles De Koninck, *The Hollow Universe* (Québec: Les Presses De L’Université Laval, 1964).

⁹⁰ Aristotle, *De Anima* II.4 (415a29-415b3). “The most natural act is the production of another like itself, an animal producing an animal, a plant a plant, in order that, as far as its nature allows, it may partake in the eternal and divine. That is the goal towards which all things strive, that for the sake of which they do whatsoever their nature renders possible.”

information in a process that developed by chance in some complex chemical conglomerates floating in the primal sea.⁹¹

3. Contribution: A New Image of the World

The tremendous gift of De Koninck's work on evolution is to develop a new image of the world for Christians, an image that connects the mysteries of the faith with the scientific theory of evolution. De Koninck speaks of the importance of such an image.

One of the most regrettable things that could have happened to us, us scholastics, is having been, for several centuries, deprived of an image of the world. And I take "image" in the strict sense of phantasm. Our intelligence, quite distinct from the imagination, has need of the phantasm. The phantasm is of the essence of human knowledge. One does not think without it. The more the phantasms are rich, the more the ideas they support are clear.⁹²

The theory of evolution presents a challenge to the believer. Christians must struggle to find their place in a cosmos where they are told by science that man is simply the most complicated molecular mechanism that has developed till now on this speck of our universe, which may be only one of an infinite number of different universes.⁹³

Evolutionary biologist and atheist apologist Richard Dawkins articulates the apparent absurdity of the Christian affirmation that "the Redeemer of man, Jesus Christ, is the center of the universe and of history."⁹⁴

Suppose that, at the moment of Christ's death, the news of it had started traveling at the maximum possible speed around the universe outwards from the earth. How far would the terrible tidings have traveled by now? Following the theory of special relativity, the answer is that the news could not, under any circumstances whatever, have reached more than one-fiftieth of the way across one galaxy — not one-thousandth of the way to our nearest neighboring galaxy in the 100-million-galaxy-strong universe. The universe at large couldn't possibly be anything other than indifferent

⁹¹ For example, see Jacques Monod, *Chance and Necessity*, "Living beings may be distinguished from all other beings including crystals by a purely quantitative criterion. They can transmit a quantity of information several orders of magnitude greater than any non-living being."

⁹² De Koninck, *Image of the World*. "Une des choses les plus regrettables qui ait pu nous arriver, nous autres scolastiques, c'est d'avoir été depuis des siècles, privés d'une image du monde. Et je prend 'image' au sens strict de phantasma. Notre intelligence, bien distincte de l'imagination, a besoin de phantasme. Le phantasme est de l'essence de la connaissance humaine. On ne pense...pas...sans lui. Plus les phantasmes sont riches, plus les idées qu'ils étayent sont nettes" (CDK Archive, Folder 20: Part 6, 23).

⁹³ Rémi Brague tells the story of our loss of the ancients' image of the world in *Wisdom of the World; The Human Experience of the Wisdom of the World in Western Thought*, trans Teresa Lavender Fagan (Chicago: The University of Chicago Press, 2003). See especially "The Lost World," 217-228.

⁹⁴ John Paul II, *Redemptor Hominis* 1.1979.

to Christ, his birth, his passion, and his death. Even such momentous news as the origin of life on Earth could have traveled only across our little local cluster of galaxies. Yet so ancient was that event on our earthly time-scale that, if you span its age with your open arms, the whole of human history, the whole of human culture, would fall in the dust from your fingertip at a single stroke of a nail file.⁹⁵

Since the news of Christ's death could not have reached most of the universe in the two thousand years that have passed since it occurred, by any means that Dawkins can imagine, he concludes that "The universe at large couldn't possibly be anything other than indifferent to Christ, his birth, his passion, and his death."⁹⁶ Spiritual power seems to be unimaginable for Dawkins. Similarly, the universe must be absolutely indifferent to the emergence of life on Earth since "even such momentous news as the origin of life on Earth could have traveled only across our little local cluster of galaxies."⁹⁷

Monod pronounces with the same triumphant materialism the absolute unimportance of man in the cosmos.

We call these events (accidental alterations of DNA sequences) accidental; we say that they are random occurrences. And since they constitute the *only* possible source of modifications in the genetic text, itself the *sole* repository of the organism's hereditary structures, it necessarily follows that chance *alone* is at the source of every innovation, of all creation in the biosphere. Pure chance, absolutely free but blind, at the very root of the stupendous edifice of evolution...There is no scientific concept, in any of the sciences more destructive of anthropocentrism than this one.⁹⁸

According to Monod, Neo-Darwinism destroys anthropocentrism because it shows how foolish it is for man to claim a special place in the world for himself. Man can no longer think that he is the highest being on earth, the intended crown of the cosmos, if he is the product of blind chance.

For modern secular man, the world is an unconnected meaningless collection of bodies moving according to certain natural laws, from which life and man emerged by chance on one small planet in the midst of billions of galaxies of stars. We came to be for no reason and have no high purpose to which we should devote ourselves.

⁹⁵ Richard Dawkins, "Is Science a Religion?" *The Humanist* 57 Jan/Feb 1997 <http://www.thehumanist.org/humanist/jan-feb-97-humanist.html>.

⁹⁶ Ibid.

⁹⁷ Ibid.

⁹⁸ Jacques Monod, *Chance and Necessity*, 112-113; author's emphases.

Since this is the contrary of the Gospel, some Christians think that they have to reject every form of evolutionary theory to be faithful to Scripture; others hold a watchmaker version of evolution in which God starts things off and then intervenes from time to time to cause a specific leap. Very few understand that natural things are different from artifacts because they have an interior principle of movement. They accept the mechanistic vision of the world even if they add God as an external mechanic. Many have a split view of reality: there is the scientific view that deals with facts, the real world of bodies in motion; then there is the religious view that deals with nebulous things like values, souls, and God. Most have no image of a world in which they find their place as part of a greater whole.

De Koninck examines the scientific evidence for evolution, finds it convincing, and ponders the metaphysical foundations and the image of the world it presents. He shows how this image fits with sound philosophy and the Catholic faith. The result is compelling and beautiful. It leaves us with a nature that is natural (it moves itself from within) but not without a constant flow of spiritual power. It shows us the cosmos proceeding from the Father through the Son and Spirit into what is most distant from divine being, namely nonliving matter, and returning to the Father through cosmic history by the speaking of the Word and the impulse of the Holy Spirit until man the true image of the Image comes forth. He is the one who should bring the cosmos back to God through his knowing and loving God, and praising Him for His creation, but he falls. This only intensifies the return of the cosmos since it now returns to God by personal union in Christ and the action of the Holy Spirit through the sacraments and in the Church, culminating in the wedding feast of the Church and Christ.

We now see that the whole history of the cosmos has been from the beginning the temporal generation of the Son. The cosmos is the womb of Jesus; dust becomes God. The rest of history is the filling out of the body of Christ until the Last Day when the saints, body and soul, are united to God. The cosmos is within them, both in the elements they are made of, in their sensible vision of the new heavens and earth, and in their minds by which they praise God for all of creation. St.

Thomas says that although the saints do not need to physically see the new heavens and the new earth when they have the beatific vision since seeing God is enough, nevertheless, it gives them joy.

Although in the state of that perfection man is not led to the knowledge of God from sensible creatures, since he sees God in Himself, still it is pleasurable and sweet even for one knowing the cause, to consider how its similitude is resplendent in the effect; hence it comes as a joy even for the saints to consider the radiance of divine goodness in bodies, and especially in the heavenly bodies, which seem to be pre-eminent over the others.⁹⁹

The Incarnation is the central cosmic event; God assumes the body He has been preparing since the beginning of the world. The lowest is lifted up to join the Highest. The stars foretell it and lead the wise men, who have gathered the cosmos in their minds by natural knowledge, to fling themselves in adoration before the God-man. The wind and sea are calmed by a word from Christ. The earth quakes and the sun darkens at his death. History continues as the completion of God's body. The end of the cosmos, under this form, will occur when Christ's body is complete. Then the saints will join Mary in perpetual adoration of their Creator and the Lamb that was slain for them. The cosmos ends at the wedding feast of the Lamb, the definitive return, the union of the cosmos-bride with its Creator-bridegroom. De Koninck says, "This world here below will be assumed in the resurrection. The world only achieves itself at the summit, and its achievement will be an assumption."¹⁰⁰ We see the importance of the Ascension of Jesus and the Assumption of Mary as the beginning of the definitive return of the cosmos in Christ and Mary. Christ precedes us as our head. "In Christ ascended into Heaven, the human being has entered into intimacy with God in a new and unheard-of way; man henceforth finds room in God forever."¹⁰¹ Mary precedes us to make physically present the first return of the rest of His body that she,

⁹⁹ *Compendium Theologiae* I.170: "Et quamvis in statu perfectionis illius homo ex creaturis sensibilibus in Dei notitiam non adducatur, cum Deum videat in se ipso, tamen delectabile est et iucundum etiam cognoscenti causam, considerare qualiter eius similitudo resplendeat in effectu: unde et sanctis cedet ad gaudium considerare refulgentiam divinae bonitatis in corporibus, et praecipue in caelestibus, quae aliis praeeminere videntur."

¹⁰⁰ *Course Notes on Nietzsche*. "Et ce bas monde même sera assumé dans la résurrection. (Lecture 4, p. 8.) Le monde ne s'achèvera qu'au sommet, et son achèvement sera une assumption." (*Course sur Nietzsche*, Lecture 4, p. 9).

¹⁰¹ Benedict XVI, Homily in Cassino, Piazza Miranda, May 24, 2009.

joined to her Son, will bring about. “In Mary all humanity is involved in the Assumption to God, and together with her all creation, whose groans and sufferings, St Paul tells us, are the birth-pangs of the new humanity. Thus are born the new Heaven and the new earth in which death shall be no more, neither shall there be mourning nor crying nor pain any more (cf. Rv 21:1-4).”¹⁰² Her coronation is the beginning of the last judgment, the affirmation by God, that all is very good.

The immensity of the universe and the billions of years of its existence before man appears do not make man insignificant for De Koninck but emphasize his importance. All this is for man.

The fact of saying that all must be ordered to man in this universe of space can be disconcerting at first view. It is true that one expects to see the end of this universe realized there where it appears with the most splendor. And yet, it is not in the magnificent nebulae that we must seek this intelligence to which all these things are destined; and it is not in the suns; but on one poor small planet, a grain of dust, cold, being almost, and quite near to non-being; it is on this planet that we must seek intelligence.

Let us not be amazed: the surprise accompanies all that is great. When God Himself appeared in the world, he was not installed on a throne, and he was not even a Roman: it was necessary to seek him in a cave, bedded on straw, and warmed by an ox and an ass.

It is one same law that rules all that. It is because God is great that He can also humble Himself.¹⁰³

For De Koninck, the smallness and obscurity of Earth make it all the more suitable for the manifestation of God’s mercy. *He lifts up the lowly*. As we have seen, mercy is the root of every divine act. “Mercy, having the meaning of absolute universal root, extends from one end of the universe to the other.”¹⁰⁴ God’s mercy is manifested the most on “this one poor small planet.” God pours out His goodness all the way to the edge of being, to matter. He creates a Universe of

¹⁰² Benedict XVI, Homily, Solemnity of the Assumption of the Blessed Virgin Mary, August 15, 2008.

¹⁰³ Charles De Koninck, “L’Evolution en Biologie Philosophique.” “Le fait de dire, que tout doit être ordonné à l’homme dans cet univers d’espace, peut déconcerter à première vue. Il est vrai qu’on s’attendrait à voir réalisée la fin de cet univers là où il apparaît avec le plus d’éclat. Et cependant, ce n’est pas dans les grandioses nébuleuse qu’il faut chercher cette intelligence à laquelle toutes ces choses sont destinées, et ce n’est pas dans les soleils ; mais sur une pauvre petite planète, un grain de poussière refroidi, éteint presque, et tous près du néant ; c’est sur cette planète qu’il faut chercher l’intelligence.

Ne nous en étonnions pas: la surprise accompagnent tout ce qui est grand. Lorsque Dieu même apparut dans le monde, il ne s’est pas installé sur un trône, et il n’était même pas un romain: il fallait le chercher dans une caverne, couchée sur la paille, et réchauffé par un bœuf et un âne.

C’est une même loi qui régit tout cela. C’est pourquoi Dieu est grand qu’il peut s’humilier aussi...” (Charles De Koninck Archive, Folder 20:Part 5, 28).

¹⁰⁴ *Ego Sapientia*, 22. “Ayant raison de racine absolument universelle, la miséricorde s’étend d’un bout à l’autre de l’univers” (*La Sagesse*, 69).

powerful angelic spirits and a corporeal cosmos; then He takes flesh on this “grain of dust” in the corporeal cosmos and dies for the most insignificant intellectual creatures that exist.

Thus De Koninck succeeds in developing a new image of the world in which there is meaning and unity. All infrahuman creatures, even the most remote galaxies, serve humans. Angels and men govern the world in many ways. Angels exercise more grandiose cosmic causality by moving cosmic bodies and directing evolution, but even men shape the world to be a better home for man. The more knowledgeable angels and humans can teach the ignorant; those closer to God can lead humans who are farther from God closer. These actions of ministering to one another and ordering and shaping the whole cosmos weave a universe out of many creatures. The goal is Christ and the path is history. Cosmology and Salvation history are woven together in a drama that will be resolved at the end of the world. Every human action has cosmic significance, because it has a bearing on the final outcome of history.

Gaudium et Spes speaks of a likeness between the unity of affection among humans and the union of the divine persons when it comments on the same line from John 17, “that they may be one; even as we are one” (Jn 17:11).

Indeed, the Lord Jesus, when He prayed to the Father, “that all may be one. . . as we are one” (John 17:21-22) opened up vistas closed to human reason, for He implied a certain likeness between the union of the divine Persons, and the unity of God’s sons in truth and charity. This likeness reveals that man, who is the only creature on earth which God willed for itself, cannot fully find himself except through a sincere gift of himself.¹⁰⁵

John Paul II, in his *Theology of the Body*, explains how man and woman mirror the Trinitarian communion, in marriage; De Koninck, in *The Cosmos*, explains how the whole cosmos mirrors the Trinitarian communion, in evolution. Even subhuman creatures *find themselves* by a *gift of themselves* in the generation of mutated progeny. We see that the cosmos is best understood as the outpouring of the gift-of-self of the Trinity. It proceeds from the processions of the Son and the Holy Spirit into the farthest reaches of primitive inorganic matter. Then it returns to the Father by the archetypes of the Word and the impulse of the Holy Spirit through a golden chain of gifts-

¹⁰⁵ *Gaudium et Spes* 24:3.

of-self. These are the true meaning of mutations, whose goal is humanity; that humanity, which when incorporated into Christ, can consciously give itself and the whole cosmos back to the Father by the love of the Holy Spirit.

APPENDIX 1

Le cosmos au point de vue théologique

[Typed text, Charles De Koninck Archive, Folder 2:Part 2, p. 24.]

Comporte les paragraphes suivants:

Avant-propos sur la Théologie Sacrée.

1. Le Cosmos comme œuvre de la Sainte Trinité.
2. Vestige et Image de la Trinité dans le Cosmos.
3. Le Vestige comme tendance vers l'Image.
4. La génération de Verbe et la génération naturelle.
5. L'Impulsion du Saint-Esprit et l'évolution cosmique.
6. La fécondité divine et la fécondité dans le Cosmos.
7. In principio creavit Deus coelum et terram.
8. La connaissance matutinale et vespérale des anges, et l'œuvre des "six jours".
9. Choses dernières.

N.B. Ceux qui désirent la suite sont priés d'en avertir M. l'Abbé Déchéne.

The Cosmos from the Theological Point of View

[Translation by Susan Waldstein]

Contains the following paragraphs;

Introduction on Sacred Theology

1. The Cosmos as the Work of the Blessed Trinity.
2. Vestige and Image of the Trinity in the Cosmos.
3. Vestige as a Tendency toward the Image.
4. The Generation of the Word and Natural Generation.
5. The Impulse of the Holy Spirit and Cosmic Evolution.
6. Divine Fruitfulness and Fruitfulness in the Cosmos.
7. In the Beginning God Created Heaven and Earth.
8. The Morning and Evening Knowledge of the Angels, and the Work of the “Six Days.”
9. Last Things.

Those who wish [to receive] the continuation are asked to contact Abbé Déchéne.

APPENDIX 2

L'impulsion du Saint-Esprit dans la Maturation du Monde

[Handwritten text in Charles De Koninck Archive, Folder 35:Part 4, pp.13-15]

[Transcription by Katherine Gardner]

Mais il y a aussi dans le cosmos un vestige de la procession du Saint-Esprit et plus spécialement dans les mutations, qui, au point de vue ontologique, sont suscités par impulsion.

Comme on le sait, la procession de l'amour Dieu ne peut-être appelée génération, puisqu'elle n'implique par l'idée de similitude. Pour le comprendre, il faut bien saisir le caractère qui distingue l'intelligence et la volonté. L'intelligence est en acte par cela que la chose connue est dans l'intelligence selon une similitude. Mais la volonté passe à l'acte, non pas par une similitude de l'objet voulue dans la volonté, mais par cela que la volonté s'incline vers la chose voulue. Il est vrai que le fait de s'incliner présuppose une certaine similitude, comme nous l'avons vu. Mais le verbe mental, le fruit de la pensée, et l'amour, possèdent diversement la similitude de leur principe: le verbe la possède en ce qu'il est lui-même la similitude de la chose connue, car l'être engendrée ressemble à l'être engendrant; au contraire l'amour possède la similitude de l'objet voulu, non pas en ce qu'il est la similitude de la chose aimée, mais en ce qu'il trouve dans la simili... sa cause. L'amour n'est donc pas le...

Mais le fils engendré est le principe de l'amour. La procession conçue sur le type de l'intelligence, implique donc l'idée de similitude, et en tant que telle, une procession peut être génération, si elle implique l'idée de similitude: car le génération engendre son semblable. Mais la procession conçue sur le type de la volonté ne trouve pas son caractère propre dans la similitude, mais plutôt dans l'idée d'une impulsion et d'une motion qui porte vers un terme:

“secundum rationem impellentio et moventis in aliquid.” Et, par conséquent, ce qui procède en Dieu selon l’amour, ne procède pas comme engendré, ou comme fils, mais plutôt comme “esprit”: or le “nom”- esprit - révèle une motion- et une impulsion vitales; ainsi nous disons qu’une personne est mue et poussée, soulevée, par amour. Le substantif latin spiritus emporte, dans les choses matérielles, l’idée d’impulsion et de mouvement; car on l’emploie pour désigner le souffle et le vent. Or le propre de l’amour est de pousser, et d’entraîner la volonté de celui qui aime vers l’objet aimé.

Or, manifestement nous trouvons un vestige de cette procession per impulsion qui n’est point une génération, dans la suscitation de nouvelles espèces vivants dans le cosmos.

Nous pouvons même dire davantage: nous pouvons attribuer l’ascension de la vie dans notre univers, au saint esprit.¹

¹ Cf. SCG IV 20; St. Augustine, *Genesis* I,4.

The Impulse of the Holy Spirit

[Unpublished English translation by David Quackenbush]

But also to be found in the cosmos is a vestige of the procession of the Holy Spirit, and more particularly in mutations, which, from the ontological point of view, are evoked by impulse.

As we know, the procession of love in God cannot be called generation, since it does not imply the idea of similitude. To understand this, it is necessary to grasp the character that distinguishes intellect and will. The intellect is in act by the fact that the thing known is in the intellect according to a similitude. But the will passes to act, not by a similitude of the willed object in the will, but by the fact that the will is inclined toward the thing willed. It is true that the fact of being inclined presupposes a certain similitude, as we have seen. But the mental word, the fruit of thought, and love, possess the similitude of their principle diversely: the word possesses it in that it is itself the similitude of the thing known, because the generated being resembles the generating being; on the contrary, love possesses the similitude of the object willed not in that it is the similitude of the thing loved, but in that it finds in the similitude (. . .) its cause. Therefore, love is not

(. . . ?) but the generated son is the principle of the love. Procession conceived on the type of the intellect therefore implies the idea of similitude, and as such, a procession can be a generation if it implies the idea of similitude: because generation generates its similar. But procession conceived on the type of the will does not find its proper character in similitude, but rather in the idea of an impulsion and of a motion that carries toward a term: “secundum rationem impellentio et moventis in aliquid.” And, consequently, what proceeds in God according to love does not proceed as generated, or as a son, but rather as “spirit”: yet, the “name” - spirit - reveals a motion - and a vital impulse; thus we say that a person is moved and urged, lifted up, by love. The Latin substantive *spiritus* carries with it, in material things, the idea of impulsion and of movement; for

it is used to designate breath and wind. However the property of love is to urge, and to carry along the will of the one who loves toward the loved object.

Clearly we find a vestige of this procession by impulsion, which is not a generation in the raising up of new living species in the cosmos.

We can even say more: we can attribute the ascent of life in our universe to the Holy Spirit.²

² Cf. SCG IV 20; St. Augustine, *Genesis* I,4.

APPENDIX 3

La Fécondité Divine

[Handwritten notes in the Charles De Koninck Archive. Folder 35: Part 4, 16-21]

[Transcription by Katherine Gardner]

C'est dans la génération du verbe et la spiration du Saint Esprit que se manifeste la fécondité absolue de Dieu: "in hoc Dei perfecta fecunditas manifestatur."

Nous retrouvons un vestige de cette fécondité à tous les degrés de l'être dans la mesure où tout être créé contient nécessairement un vestige de la Sainte Trinité. La fécondité est par conséquent une propriété nécessaire de tout être. La fécondité de la nature se manifeste ainsi dans ce que les êtres naturels sont substantiels, forme, et ordonnée entre eux; et plus manifestement dans leur génération et dans leur ascendance par impulsion. Cette fécondité devient de plus en plus grande à mesure que la génération procède davantage de l'intimité du générateur: à mesure que l'émanation devient plus intime. Cette fécondité génératrice et impulsive de la nature tend au fond vers la fécondité de l'esprit- la puisée et l'amour intellectuel- fécondité qui est si grande qu'elle reste intérieure au sujet: La nature tend vers la fécondité immanente. Et sous ce rapport cette fécondité n'est plus seulement un vestige, mais une image de la Trinité.

Dans notre univers, la fécondité génératrice est par conséquent provisoire. Après l'effondrement du monde, après la Résurrection, il n'y aura plus de génération dans la création, justement parce que son terme, la fécondité de la vie spirituelle est la véritable fin de l'œuvre de propagation, que, les personnes qui désirent se donner tout entière à la vie de l'esprit, ne sont pas tenues d'engendrer. C'est la justification la plus profonde de l'état de virginité où il y a plus de

fécondité que dans la génération naturelle. Et c'est aussi pourquoi l'état de virginité sans fécondité spirituelle, c.à.d. sans vie intérieure, et quelque chose d'abominable, profondément égoïste: on s'y détourne de la Trinité: on pêche contre le vestige et contre l'image de la Trinité en nous.

Nous avons vu l'autre jour, que la génération naturelle dans laquelle un être engendre un semblable, est une véritable génération, alors que la conception de notre verbe mental qui est pourtant un signe de plus grande fécondité, n'est pas une génération...

Ne faudrait-il pas en déduire que nous imitons davantage la Trinité dans la génération que dans la pensée? Et afin que ce vestige particulier de la Trinité demeure dans le monde, ne faudrait-il pas poursuivre la génération naturelle pour toujours?

En aucune façon. Il faut garder devant l'esprit le grand principe "*imperfecta perfecte, perfecta imperfecte*." Donnons des exemples: l'homme est un être plus noble que le cheval. Savoir courir, c'est une perfection. Et plus la course est rapide, plus elle réalise l'idée de course. Or, le cheval sait courir plus rapidement que l'homme. Donc, il est plus parfait que l'homme? -Sous un rapport, oui. Mais non pas purement et simplement. La vitesse, en effet, est une perfection qui peut être milieux. Réalisé dans les choses inférieurs que dans les choses supérieurs: et ainsi la délicatesse de la complexion humaine qui est avant tout au service de la pensée, est incompatible avec la nature et la musculature favorable à la vitesse. C'est donc parce que l'animal est inférieur qu'il peut comporter cette supériorité: *imperfecta perfecte*. Pour donner un autre exemple tiré de S. Thomas: quoique l'or soit un métal plus noble, on peut mieux faire des couteaux et des scies avec de l'acier. Ex. aussi de l'unité de la matière première, mais autant que reprise de Trinité: nulle.

Il est de même dans les choses humaines. La fécondité naturelle est plus facile et plus certaine que la fécondité spirituelle: mais cela n'empêche pas que celle-ci ne soit purement et simplement plus parfaite.

La raison profonde pour laquelle la perpétuation des processus de génération naturelle est impossible- c'est que la génération naturelle considérée sous le rapport de la durée, tendrait vers l'infini. Or, l'infini ne peut être fin. Elle est donc touchée entièrement fonctionnelle et provisoire.

Encore un mot. Dans son Traité de la Trinité, Saint Augustin dit que Dieu est tellement Un qu'il est Trinité, et qu'il est tellement Trinité qu'il est Un. L'unité montre sa profonde identité, la Trinité sa fécondité.

Or, sous le rapport du vestige, nous pouvons en dire autant des êtres naturels. Nous avons vu, en effet, qu'au point de vue ontologique, un être est parfait dans la mesure de son unité et de sa simplicité: l'homme est plus simple que l'animal, et plus un. L'animal, en son tour, est plus un que la plante etc... De sorte que, à mesure que les êtres naturels sont plus uns, ils sont aussi plus vestiges de la Trinité. Et, tendant vers l'unité de l'homme, les natures tendent vers la trinité psychologique de l'âme humaine qui est faite à l'image de la Trinité divine.

Divine Fruitfulness

[Unpublished English translation by David Quackenbush]

It is in the generation of the word and the spiration of the Holy Spirit that the absolute fruitfulness of God is manifested: “in hoc Dei perfecta fecunditas manifestatur.”

We find a vestige of this fruitfulness in all the degrees of being in the measure that every created being necessarily contains a vestige of the Holy Trinity. Fruitfulness is consequently a necessary property of all being. The fruitfulness of nature is thus manifested in that natural beings are substantial, form[al], and ordered among themselves; and more manifestly in their generation and in their ascendance by impulsion. This fruitfulness becomes greater and greater in the measure that generation proceeds from the intimacy of the generator: in the measure that the emanation becomes more intimate. This generative and impelling fruitfulness of nature tends at bottom toward the fruitfulness of spirit—thought and intellectual love—a fruitfulness that is so great that it remains interior to the subject: Nature tends toward immanent fruitfulness. And in this respect this fruitfulness is not only a vestige, but an image of the Trinity.

In our universe, generative fruitfulness is consequently provisional. After the collapse of the world, after the Resurrection, there will no longer be any generation in creation, precisely because its term, immanent fruitfulness, will be sufficiently realized. And it is also because the fruitfulness of the spiritual life is the true end of the work of propagation that those persons who desire to give themselves entirely to the life of the spirit are not obliged to generate. This is the most profound justification of the state of virginity where there is more fruitfulness than in natural generation. And it is also why the state of virginity without spiritual fruitfulness (i.e. without an interior life) is something abominable and profoundly selfish: one is diverted from the Trinity; one sins against the vestige and against the image of the Trinity in us.

We saw the other day that natural generation, in which a being generates a likeness is a true generation, while the conception of our mental word - which however is a sign of a greater fruitfulness—is not a generation.

Would it not be necessary then to deduce that we imitate the Trinity more in generation than in thought? And in order that this particular vestige of the Trinity remain in the world, would it not be necessary to pursue natural generation forever?

In no way. We must keep in mind the great principle “*imperfecta perfecte, perfecta imperfecte*.” Let us give some examples: man is a more noble being than horse. To know how to run is a perfection. And the more rapid is the running, the more it realizes the ideal of running. Now, the horse can run more rapidly than the man. Is he therefore more perfect than a man? In this respect, yes. But not purely and simply. Speed, in effect, is a perfection that can be better realized in inferior things than in superior things: and thus the delicacy of the human complexion, which is entirely in the service of thought, is incompatible with the nature and the musculature favorable to speed. It is therefore because the animal is inferior that he can have this superiority: *imperfecta perfecte*. To give another example taken from St. Thomas: although gold is a more noble metal, one can make better knives and saws with steel. Example, also, of the unity of prime matter, but as representation of the Trinity: by no means.

It is the same in human things: natural fruitfulness is easier and more certain than spiritual fruitfulness: but that does not prevent it from being purely and simply more perfect.

The profound reason for which the perpetuation of the process of natural generation is impossible—is that natural generation, considered under the respect of duration, would tend toward the infinite. But the indefinite cannot be an end. Therefore it (natural generation) is entirely functional and provisional.

One more word. In his Treatise on the Trinity, Saint Augustine says that God is so One that He is Trinity, and that He is so Trinity that He is One. The Unity shows His profound identity, the Trinity His fruitfulness.

Now, under the respect of vestige, we can say the same of natural beings. We have seen, indeed, that from the ontological point of view, a being is perfect in the measure of its unity and of its simplicity: man is more simple than animal, and more one. Animal, in its turn, is more one than plant, etc. . . . So that, in the measure that natural beings are more one, they are also more vestiges of the Trinity. And, tending toward the unity of man, natures tend toward the psychological trinity of the human soul, which is made in the image of the divine Trinity.

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