

**Living Creation Theology in the Context of Modern Science:
The Distinctive Contribution of the Franciscan Theological Tradition**

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I am honored to be part of this auspicious gathering on the occasion of the 800th anniversary of the meeting between Francis of Assisi and Malik El Kamil. They lived in a world very different from ours and yet their fundamental challenges were remarkably close to our own. Neither Francis nor Malik would have recognized the term “creation theology,” since for them knowledge of God deeply was tied to knowledge of creation. The term “creation theology” belongs to theology proper in the sense that the task of theology cannot be done apart from creation. Since the Middle Ages, philosophical and scientific shifts have given way to theological stasis or fixity and, to some extent, disconnection from the wider cosmos. So it is right and proper to ask, what can the Franciscan theological tradition contribute to creation theology today?

The significance of Franciscan theology was brought to light in 2013 when Pope Francis issued his timely encyclical *Laudato Si: On Care for Our Common Home*. In it he drew attention to the interdependence of all living creatures grounded in the primacy of God’s love. Among his many sources, the Pope looked to Bonaventure and his doctrine of exemplarism to help the wider Church realize that every living creature bears a unique relationship to God. Duns Scotus formulated a comparable idea using a different philosophical concept, that of *haecceitas*, focusing on the intrinsic value of every existent or being. As the principal architects of Franciscan theology (although not to the exclusion of other great thinkers in the tradition) Bonaventure and Scotus constructed a latticework of ideas that grew out of the spiritual experience of Francis of Assisi. Based on their core insights I want to focus on several principal ideas: deep Incarnation, the

primacy of Christ and a metaphysics of love. I will discuss their insights with regard to what science is pointing out today in terms of deep relationality, cosmic holism and evolution. I will suggest that the insights of Scotus, pave the way for process theology and, in particular, the work of Pierre Teilhard de Chardin. Finally, I will argue that Franciscan theology may be one of the most vital theological resources for the 21st century.

Deep Relationality

Up to the modern period, the static, fixed Ptolemaic universe was the operative paradigm of cosmic life. In the Middle Ages, theologians developed their ideas based on Ptolemaic cosmology and inherited Greek philosophical insights. While Neoplatonism contributed to metaphysics, Aristotle influenced concepts of matter and form. The rise of heliocentrism in the late 15th century displaced the Ptolemaic universe but not without conflict. Eventually heliocentrism prevailed in the sciences, while Christian theology retained the medieval synthesis. For three hundred years, Newton's vision of absolute space and absolute time was the sacred dogma of scientific cosmology. Space, for Newton, was an empty stage on which the drama of physics played out, a constant emptiness everywhere and at all times. Time, too, was constant. No matter where one stood in the universe, time flowed at the same rate. Albert Einstein's short revolutionary paper in 1905 swept away absolute space and time in a single stroke. Space is not an empty stage nor does time flow at a fixed rate. Rather space and time form a single continuum, each relative to the other. According to Adam Frank, "the new universe was a *hyperspace*, a world with an extra dimension. . . .in relativity every object becomes four-dimensional as it extends through time."¹ In 1916 the Dutch physicist Willem de Sitter constructed a universe that could stretch in different directions 'like taffy,' a theoretical insight that received experimental support

in 1928 when the astronomer Edwin Hubble “using the most powerful telescope of his day, found that every galaxy in the sky was moving away from us.”² By measuring the movement of galaxies, Hubble and others postulated that the universe is expanding.

Today we know our universe to be old, large, dynamic and interconnected. Our 13.8 billion year old universe began as a small hot dense singularity that rapidly inflated and cooled with expansion. The elastic nature of space-time impelled Einstein to think of gravity not as a substance but as a curvature of space-time by matter. In other words, gravity acts to structure space. Einstein’s equations led to a most startling insight--that the elastic nature of the universe implies change—an insight Einstein himself was not comfortable with. Georges LeMaitre coined the term “big bang universe” and the notion of a hot big bang universe was later proposed. Some scientists estimate that the future age of the universe will be 100 trillion years, although the sun will die out long before then, perhaps four to six billion years from now. Our own galaxy, the Milky Way, is a mid-size galaxy consisting of billions of stars and stretching about 100,000 light years in diameter. The galaxies are often grouped into clusters—some having as many as 2,000 galaxies together. We are one of billions or maybe even a trillion galaxies.

Einstein’s theory of special relativity evoked a new understanding of matter. Contrary to the ancient philosophical notion of matter as substance, Einstein postulated that the mass of a body is a measure of its energy content. Mass and energy are not identical but equivalent shown by the equation $E = mc^2$. Hence matter can be converted into energy and energy into matter. Einstein himself was perplexed by the mysterious nature of matter as a form of energy and had problems with quantum physics. There was speculation that a particle split in two, for example, could communicate over vast distances between the two halves almost instantaneously, what became known as quantum entanglement. How could this be? Only if the vast seemingly empty spaces

of the universe are really not so empty after all, but complex layers of energy fields. This insight led to the realization that space is not empty but filled with infinite fields of energy. Paul Dirac quipped that the intrinsic interconnectedness of physical matter is such that if you pick a flower on earth, you will move the farthest star. Nature is an undivided wholeness.

Relational Holism

David Bohm, a contemporary of Einstein, spoke of the quantum world in terms of implicate order, deeply entangled interactive fields governed by a principle of quantum wholeness. Bohm started with a notion of undivided wholeness and derived the parts as abstractions from the whole. He called this unbroken order “implicate order,” indicating an enfolding of events. Implicate order is a way of looking at reality not merely in terms of external interactions between things, but in terms of the internal (enfolded) relationships among things. Whereas classical physics is based on parts making up wholes, Bohm took relationships between parts as primary. Each part is connected with every other part at the quantum level. The whole is the basic reality so that being is intrinsically relational and exists as unbroken wholeness in a system. The notion of implicate order led Bohm to say that as human beings and societies we seem separate, but in our roots we are part of an indivisible whole and share in the same cosmic process.

Although quantum mechanics is still hotly debated among scientists, there is a holism in nature that baffles scientists and does not let them rest easily. Philosopher Jonathan Schaffer claims that the fundamental layer of reality is not made of particles or strings but the universe itself—understood not as the sum of things making it up but rather as a single, entangled quantum state. That is, the universe itself is an entangled whole. What looks like "many worlds" from the

perspective of a local observer is indeed a single, unique universe from a global perspective (such as that of someone who would be able to look from outside onto the entire universe).

Evolution

The theory of evolution emerged among nineteenth century biologists but was made famous by Charles Darwin in his *Origin of the Species by Means of Natural Selection*. What Darwin showed was that natural life unfolds primarily through the process of natural selection, “a process that promotes or maintains adaptation and, thus, gives the appearance of purpose or design.”³ Darwin indicated that changes in the biological world are not due to outside forces or purposeful function of an organism but to mechanisms in nature such as natural selection and adaptation, which promote or maintain adaptation and thus give the appearance of purpose or design.⁴ In a sense, Charles Darwin did for biology in the nineteenth century what Albert Einstein did for physics in the twentieth century: put to rest the understanding of nature as static and fixed.

Although Darwin showed how natural selection could account for species variation, he could not explain the appearance of mind or consciousness. As a result, “mental qualities were either squeezed out of existence or dismissed as mere causally inefficacious and epiphenomenal by-products of brain processes.”⁵ Wolfgang Pauli found this troublesome since scientific theories themselves were “products of the psyche.”⁶ More recently philosopher Thomas Nagel wrote that the mind has eluded physical explanation because “the great advances in the physical and biological sciences excluded the mind from the physical world.”⁷ Hence Darwinian evolution can explain material complexity but it treats consciousness as a later phenomenon that appears at higher levels in the process. There is an intrinsic contradiction in Darwinian evolution since, apart from mind, nothing can be said of matter.

Mind and Matter

In the early twentieth century the physicist Max Planck said that consciousness is fundamental to matter; everything begins with consciousness. In the 1950s astrophysicist James Jean wrote: “The universe looks more like a great thought than a great machine. Mind no longer appears as an accident intruder into the realm of matter. . . . The quantum phenomena make it possible to propose that the background of the universe is mindlike.”⁸ Erwin Schroedinger, like Planck, thought that consciousness is singular and absolutely fundamental to matter; everything begins with consciousness which itself is immaterial. If consciousness was merely a product of biological emergence rather than a fundamental basis of physical life, it would be difficult to explain quantum phenomena. Robert Lanza suggests that life and consciousness are fundamental to understanding the nature of our reality, and that consciousness comes prior to the creation of the material universe.

The concept of “panpsychism” states that consciousness is fundamental and matter depends on consciousness. Panpsychism holds that even the smallest layers of reality have experience. It aims to locate the building blocks of reality in the most basic layer of reality identified by physics. Since it is impossible to say anything about matter apart from consciousness, it is reasonable to suggest that consciousness and matter form an integral unity. In this respect there is no “unconscious” matter; rather there is a level of consciousness in everything, from primitive or proto-consciousness to complex self-reflective consciousness, from conscious quarks, rocks and spoons to conscious amoebas, tables and trees. Phillip Goff explains that panpsychism is the best explanation for our current understanding of physics. He writes:

Physical science doesn't tell us what matter *is*, only what it *does*. The job of physics is to provide us with mathematical models that allow us to predict with great accuracy how matter will behave. This is incredibly useful information; it allows us to manipulate the world in extraordinary ways, leading to the technological advancements that have transformed our society beyond recognition. But it is one thing to know the *behaviour* of an electron and quite another to know its *intrinsic nature*: how the electron is, in and of itself. Physical science gives us rich information about the behaviour of matter but leaves us completely in the dark about its intrinsic nature. In fact, the only thing we know about the intrinsic nature of matter is that some of it – the stuff in brains – involves experience. We now face a theoretical choice. We either suppose that the intrinsic nature of fundamental particles involves experience or we suppose that they have some entirely unknown intrinsic nature. On the former supposition, the nature of macroscopic things is continuous with the nature of microscopic things. The latter supposition leads us to complexity, discontinuity and mystery. The theoretical imperative to form as simple and unified a view as is consistent with the data leads us quite straightforwardly in the direction of panpsychism.⁹

If panpsychism is an apt description of reality, then consciousness is not something that appears with complex brains; rather consciousness is that which enables brains to evolve in the first place. Menas Kafatos and Robert Nadeau suggest that if human consciousness has emerged out of cosmic wholeness and is part of it, it is possible that an element of consciousness is active in the universe, that is, *cosmic consciousness*.¹⁰ Physicist Henry Stapp wrote: “Our human thoughts are linked by non-local connections: what a person chooses to do in one region seems immediately

to affect what is true elsewhere in the universe.”¹¹ Neuroscientist Christof Koch writes, “we lack a coherent framework for consciousness. Although consciousness is the *only* way we know about the world within and around us there is no agreement about what it is, how it relates to highly organized matter or what its role in life is.”¹² Giulio Tononi’s Integrated Information Theory argues that something has a form of “consciousness” if the information contained within the structure is sufficiently “integrated,” or unified, so the whole is more than the sum of its parts. Because it applies to all structures—not just the human brain—Integrated Information Theory shares the panpsychist view that physical matter has innate conscious experience. Tononi’s theory postulates that the amount of integrated information that an entity possesses corresponds to its level of consciousness. One consequence of this theory is that all systems that are sufficiently integrated and differentiated will have some minimal consciousness associated with them: not only our beloved dogs and cats but also mice, squid, bees and worms.¹³

Science today is telling us that the lines between inorganic and organic or non-living and living nature no longer hold true. Ilya Prigogine, whose work on complex, dynamical systems won him the Nobel prize, said that communication or consciousness exists even in chemical reactions where molecules know, in some way, what the other molecules will do even over macroscopic distances. Throughout all of life, there is creative dialogue between matter and consciousness; neither is reducible to the other and, yet, neither can function without the other. According to scientist Fritz Popp, the difference between a living and non-living system is the radical increase in the occupation number of the electronic levels.¹⁴ The difference of consciousness between living and non-living is one of degree not principle.¹⁵ Nature seems to have a built-in awareness of its own integral wholeness.

Wolfgang Pauli who was one of early pioneers of quantum physics said, “It would be most satisfactory if physis (matter) and psyche (mind) could be conceived as complementary aspects of the same reality.”¹⁶ By way of definition, “Two or more descriptions are complementary if they mutually exclude one another and yet are together necessary to describe the phenomenon exhaustively.”¹⁷ This notion excludes reductionism of either an idealist (the primacy of consciousness or panpsychism) or materialist nature (binary matter and mind) while being necessarily incompatible with dogmatic physicalism and scientific materialism. Carl Jung proposed a view of basic reality which does not consist of parts but is an unfragmented whole, the *unus mundus*; mind and matter form a complementary whole which cannot be reduced to parts.¹⁸ Consciousness and relationality are the two fundamental aspects of the physical universe.

Teilhard and Scotus

Pierre Teilhard de Chardin was a Jesuit scientist, a paleontologist by training, who was concerned that Christianity had become irrelevant in a world of modern science. He sought to bring science and faith together, as two aspects of the same conjugate of the knowing process. Teilhard understood the science of evolution as the explanation for the physical world and viewed Christian life within the context of evolution. Evolution, he claimed, is ultimately a progression towards consciousness; the material world contains within it dynamism toward spirit. The human person is unique, Teilhard wrote, because she or he has the ability to reflect; we know that we know. The human person is integrally part of evolution in that we rise from the process but we can reflect on it and direct its future. Quoting Julian Huxley, Teilhard wrote that the human person “is nothing else than evolution become conscious of itself.” To this idea he added, “the consciousness of each of us is evolution looking at itself and reflecting upon itself.”¹⁹ Thus the human person is integral

to evolution; s/he is “the point of emergence in nature, at which this deep cosmic evolution culminates and declares itself.”²⁰ The universe orients itself toward intelligent, conscious, self-reflective life.

Teilhard indicated that intelligent life cannot be considered in the universe any longer as a superficial accident but, rather, must be considered to be under pressure everywhere—ready to burst from the smallest crack no matter where in the universe—and, once actualized, it uses every opportunity and means to arrive at the extreme of its potentiality, externally of complexity, and internally of consciousness.²¹ Thomas King wrote: “In his direct experience of the cosmos, Teilhard believed he found an ‘Absolute’ that drew him and yet remained hidden. . . .He decided to surrender and allow himself to be rocked like a child in the arms of the great mother—the earth.”²² In dialogue with the physicists of his day, he posited a fundamental law of attraction in the universe that corresponds to a rise in consciousness. He considered matter and consciousness not as “two substances” or “two different modes of existence, but two aspects of the same cosmic stuff.”²³ Life, he wrote, is “a specific effect of matter turned complex; a property that is present in the entire cosmic stuff.”²⁴ From the Big Bang onward there is a “withinness” and “withoutness,” or what he called, radial energy and tangential energy.²⁵ Consciousness is the withinness or “inside” of matter and attraction is the “outside” of matter; hence, matter is both attractive (tangential) and transcendent (radial). The complementarity of mind and matter explains both the rise of biological complexity and the corresponding rise of consciousness. Together they express a core energy in the universe which Teilhard identified with love. The physical structure of the universe, he said, is love.

Omega

As a paleontologist, Teilhard accepted evolution as the basis for human emergence; however, he felt that Darwinian evolution did not adequately explain the complexification of mind in nature. Following Henri Bergson, he posited a principle of wholeness that is within yet distinct from nature itself. In his essay 'The Heart of Matter' (1950) he described a divine 'diaphany,' a 'shining through' of divine presence in matter, a presence of divine power in all living things. Teilhard identified this diaphanous presence with Omega. One can see here a complement to Bonaventure's notion of "concursum" whereby there is a dynamic and ongoing involvement of God in created order. Bonaventure stressed that every single moment of a creaturely existence is a gift since "it is only by God's concurrence that things are sustained in being."²⁶ Teilhard saw the work of Omega as intrinsic to creaturely activity itself; that is, contingent being is not dependent on divine love in a Neoplatonic sense. He wrote: "God acts from within, at the core of each element, by animating the sphere of being from within. Where God is operating, it is always possible for us to see only the work of nature because God is the formal cause, the intrinsic principle of being, although God is not identical with being itself."

Teilhard's concept of Omega is similar to Duns Scotus's idea of concurrence. To appreciate Scotus's insight is first to affirm that the Subtle doctor's unabashedly novel theology provides a ground for understanding process theology in our scientific age. Process theology originated with Alfred North Whitehead who saw western Christianity as nothing more than a footnote to Plato. Whitehead sought an understanding of God consonant with a world of change. He spoke of God as the primordial subject of the never-ending act of existence, a determinate reality here and now but with unlimited capacity to acquire further determinates in later moments of divine existence. God's eternal purpose is to evoke creatures with the richest possible form of experience into being in love; creativity is a process by which the many become one and are increased by one. Process

theology claims that that divine being and created being are in mutual relationship. God is not omnipotent in terms of being coercive but persuasive. The universe is characterized by process and change carried out by the agents of free will. Self-determination characterizes everything in the universe, not just human beings. God cannot force anything to happen, but God can influence the exercise of this universal free will by offering possibilities. For God to be perfect, God must be both powerful and leave other beings some power to resist the divine persuasion. God can change in so far as God can be affected by events in the universe; however, such change does not affect the primordial pole or unoriginate goodness of God.

Scotus held a position that was deeply catholic and faithful to the experience of Francis of Assisi—God entered the material world in the incarnation. Like Bonaventure, he focused on the Trinitarian and relational God as Creator and grounded his doctrine in a Trinity of generous love. His theological synthesis is summed up in the words: God is love (1 Jn 4:8). Since everything has its origins in God, everything has its origins in love. God creates because God freely wishes to reveal and communicate Godself to others as the fullness of God's own love. Hence, love is our deepest reality not as a participative reality but as a true reality of relationship. Scotus rejected analogy of being with its deep Neoplatonic roots as the first principle of order and posited that there is one order of being—univocal being (literally, one voice)—in which divine being and created being exist, each according to its own nature. Hence God does not exist outside the relational ordering, as if only the effects were ordered and the cause lay outside the relationship. Rather there is a common relation between Creator and creature in regard to each other. Univocal being posits a common foundation between the mind and reality so that knowledge of God is truly possible through everything that exists.²⁷

God creates by bringing that which does not yet exist (potentiality) into being (actuality); hence God brings being into relationship and exists in relationship to that which is created. It is this unique being-in-relationship that Scotus defines as *haecceitas*, a principle of individuation which grants to each being its own unique beingness, the singular gift of being that makes something “this” and not “that.” Everything that exists, from quarks to stars, leaves and worms, emerges from the unique love of God; everything has its own *haecceitas*.²⁸

God Who Acts With

How God acts in relation to each unique being is described by Scotus’s principle of “concurrence” which is the simultaneous operation of primary and secondary causes, an acting-along-with rather than an acting-in.²⁹ Basically this doctrine states since everything has its own unique being, the activity of each being is concurrent with divine presence as both source of each unique being and the freedom of each being to be itself, in its own creative activity. Concurrence is the simultaneous operation of primary and secondary causes, an acting-along-with rather than an acting-in. As a result, “the less perfect cause can add something, inasmuch as the cumulative effect of the more perfect cause and the less perfect cause is more perfect than the effect of the more perfect cause alone. The created world can thus add some perfection and nobility to what comes from the uncreated cause, which therefore is no longer necessarily more perfect or nobler than what it causes.”³⁰ In short, the “being of the effect does not depend any longer on [God’s] gift of being.”³¹ Everything that exists has its own unique being-ness, its *haecceitas*, and the activity of its being is the divine presence which is both the source of its unique being and the freedom of being to be itself in its own creative activity. Hence there is a mutual relationship between God and created being; God participates in being as being participates in God. In a sense,

every creative act of being transcends God and every creative act of God transcends being. Stretching Scotus's concept of concurrence into a modern framework of evolution, I would suggest that the consciousness dimension of materiality is the presence of Omega, the divine depth of each material existent is a principle of consciousness. The complexification of matter is the movement from lower levels of consciousness to higher levels of consciousness and deeper relationships of love. Hence the principle of concursus can help explain the dynamic transcendence of being described by the process of evolution.

Scotus's doctrine of concurrence is strikingly similar to the way Teilhard framed divine causality. God is the formal cause, the intrinsic principle of being, although God is not identical with being itself. God acts from within, at the core of each element, by animating the sphere of being from within. Where God is operating, it is always possible for us to see only the work of nature because God is the intrinsic principle of being. As principle of being, God imparts to creation its inner dynamism but what nature creates can transcend God. Thus while God is principle of nature's creativity, nature's creativity can transcend God. God and created being are a unified creative act. God is creating through matter and in a certain sense in union with it. He believed that without creation, something would be absolutely lacking to God, considered in the fullness not of his being but of his act of union. Creation contributes to God what God is lacking in God's own life, namely, materiality. Since this finite universe is God's very (actualized) existence, God is a dynamic process of creative love. It is the actualization of God's love that is the basis of everything that exists.

Christogenesis

Both Bonaventure and Scotus saw an intimate connection between creation and incarnation grounded in the infinite love of God. God not only loves himself, Scotus claimed, but the reason for all divine activity is found in the very nature of God as love. He found it inconceivable that the greatest good in the universe, the Incarnation, could be determined by some lesser good such as human redemption. Such a sin-centered view means that Christ simply lessens the universe's guilt. The reason for the Incarnation is not sin but love, according to Scotus. Christ is first in God's intention to love.

When Teilhard learned of the Primacy of Christ doctrine from the Franciscan Fr. Allegra, he exclaimed, "there is the theology of the future!" The doctrine of the primacy of Christ allowed him to bring faith and evolution together in a framework of meaning: evolution is the rising up of God incarnate. Niels Gregersen has called this "deep incarnation" meaning that divinity is immersed in materiality from the Big Bang onwards. The primacy of Christ spoke to Teilhard of God's deep involvement in evolution. The God who is in evolution cannot be a God who creates from behind but must be ahead, the prime mover who is Omega.

Teilhard brought evolution and God together in such a way that the incarnation is the meaning and purpose of evolution: God is in evolution. God is creating the world out of love and the world is giving birth to God (theogenesis) through love. In an unfinished evolutionary universe, God is rising up in love, as the universe is in the process of *creating itself*. Since God's essential nature is Love, God is most deeply actualized not in beings as a universal class, but in the multitude of personal loves they exist to enact. In this sense, God does not exist as ontologically distinct absolute being in which created beings participate, but rather divine being loving in and through created being, *our* love for one another. Only in actualization can love be experienced on a *personal* level in the relations between one deepest center of being and another.

Teilhard developed his doctrine of theogenesis (literally, the birthing of God) based on the evolution of consciousness and love. He wrote: “As a direct consequence of the unitive process by which God is revealed to us, he in some way ‘transforms himself’ as he incorporates us.”³² As we come to a higher consciousness of a point of unity, God rises up in us; God *becomes* God in us. This is the meaning of incarnation; God “enters into” matter by rising up in matter as the unitive power of love. Thus we are in God and God is in us without collapsing or merging these two realities, since they form a single unified reality. This emerging reality is the Christ, God’s personal embodied presence in evolution. Peter Todd writes: “Teilhard thinks God needs humankind to become both whole and complete. The implication is that God and humanity are in an entangled state and that the individuation of each is inextricably bound with the other. This entanglement of God and world is symbolized by the concept of Omega.” It is not enough to simply believe in God, Teilhard said; rather we are to incarnate God and help God become God, if we are to realize the potential of created existence.³³ “This transformation in consciousness,” Todd states, “is the divinization or resacralization of the world.”³⁴

If the rise of consciousness in evolution is the rise of God, then Jesus is the One in whom cosmos, anthropos and God-consciousness arrive at full union. Jesus’s unified consciousness of God is God’s full disclosure in love. In the person of Jesus, God, cosmos and the human person form a singularity of love, in effect, a new Big Bang in evolution, the release of the Spirit and a new future in God. Jesus is a new departure in the creative process, the beginning of a new possibility for human existence in which new potentialities of life are actualized in those who are willing to share in Jesus’ human and open response to God. In Jesus we find the Hebraic ethically responsible individual and the intense experience of God’s immediacy. Faith in God liberated him to accept the full implications of his freedom and responsibility. Thus we see in Jesus a new

structure of existence emerging, a new consciousness. The love of God and consciousness of God's immanent presence impelled Jesus to create a new field of atoning (or "at-onening) love, bringing into community those left outside community, healing and restoring the sick to life. Jesus is a new "centration" in the universe, a new "big bang," who ushers in a *new directionality into evolution*, culminating in the human choice for a new future in God. His death is the liberation of the Spirit of new life. Jesus is the exemplar of God in evolution and shows that we are to freely embrace and personalize the love of God. Since we actualize God in ourselves, we continue the evolution of Christ through the life-giving Spirit. Hence we must become aware of the deepest, most personal love at the center of our lives and out of this love assume a new responsibility for the life of the world.

Francis of Assisi

It is not hard to see a relationship between Francis of Assisi and the evolution of Christ. One can almost hear him singing, "the love of him who loved us is greatly to be loved."³⁵ He took the world of concrete materiality as the starting point for finding God. He was a materialist in the best sense of the word, aware that divine love incarnates all reality. As consciousness of God's indwelling love deepened within him, his eyes opened to the material world shining with the radiance of divine love. His world began to be filled with the overflowing goodness of God.

It was his deep ongoing dialogue with God, the way his life formed as a living prayer, which gradually awoke within him a new consciousness of divine presence. This new consciousness evoked a transformation of self toward a deep relationality with all creatures, calling all creatures "brother" and "sister" because they shared in the same source of life as his own. This was the source of Francis's nature mysticism. The awakening of the mystic to the presence of the

inner Sacred presence is the beginning of a new vision of reality. Martin Laird writes: “The mystic enters the center of a network of cosmic influences and is astonished at the depth and intimacy of relationship with the universe.”³⁶

Francis was deeply aware that his self was no “self” apart from the living reality of God. The more he found God in his life, the more his life shifted from a partial self with a limited view of the world, to a unified self and an experience of belonging to the whole. He lived into what Albert Einstein realized: “our separate self-sense is an illusion because we are part of a whole, though limited in time and space.”³⁷ The experience of separateness is a deception of one’s consciousness, which can restrict us from realizing our true reality of belonging to the whole. Or as Ken Wilber put it: “The ego is a contraction in the field of awareness.”³⁸ Einstein said, “our task is to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.”³⁹ This is what we see in Francis, a breakthrough in consciousness from self to other to All; an expansion of consciousness widening his sense of compassion. He attained a level of consciousness where his outer world and inner world became one seamless unity, as Maria Rainer Rilke wrote, “outer space within,” a flow of unbroken wholeness giving rise to a unified world-self; a reconciled space of unified love. Francis entered the center of a network of cosmic influences and became astonished at the depth and intimacy of relationship with the universe. He became more fully aware of his desire to be united with God.⁴⁰ Martin Laird writes: “Through divinization the mystic becomes a doorway through which Christ-Omega enters and transforms the world in the Divine Milieu.”⁴¹ In other words, *only* inner transformation can escape outer cosmic entropy and concentrate energy on higher levels of complexity. Through inner transformation, the mystic nurtures a zest for life by becoming more inwardly whole and thus creating wholeness in the outer world through the actualization of love,

drawing others into new levels of God consciousness. Hence, the human person becomes the vanguard of the evolving universe.

This creative love deepening through integrated levels of consciousness is what transforms the material universe into the living presence of Christ. Francis's planetary consciousness, his awakening to become what Teilhard called a "terrestrial," a brother to all earth-life, was the height of his spiritual journey into God, as God journeyed into and through his life; an evolution in the mutuality of love where his inner eye opened to the radiance of love at the heart of creation, the cosmic Christ. He lived into Christ Omega not as a *terminus ad quem* but as the fullness of divine presence deep within him, joining him to all other creatures by a flow of unified consciousness. Through an evolution of being in love, Francis became the very presence of God incarnate, another Christ. God was born from within and the world was born in God, a mutual being-in-love symbolized by the Christ.

Conclusion

In a world today floundering for meaning and purpose, we see Franciscan theology revealing a world steeped in divine love, a love that is creative, novel and future-oriented. Teilhard noted at one point that we need another Francis, a figure who represents a new spiritual revolution. If science and religion have fallen into odds at the table of knowledge, it is precisely because Franciscan theology *was not* invited to the banquet. Throughout his career Teilhard struggled to bring science and religion into a new framework of meaning, and his discovery of Scotus's doctrine of the primacy of Christ was key to his doctrine of Christogenesis. From different worldviews and different points of departure, the theologian [Scotus] and the scientist [Teilhard] reached the same conclusion: God is acting within each element, Jesus Christ is the motif of divine-

created relatedness and Christ is the center of the universe, the foundation of the dynamic and vital aspect of reality. This symbolic centrality of Christ for Teilhard is the organic or cosmic dimension of evolution. Creation itself is God uniting to form one with something, to be immersed in it. From a faith perspective, the whole cosmos is incarnational. “The Incarnation,” Teilhard said, “is a making new. . .of all the universe’s forces and powers. Christ invests himself organically with all of creation, immersing himself in things, in the heart of matter and thus unifying the world.”⁴²

Teilhard’s doctrine of Christogenesis enables us to orient ourselves in evolution with purpose and direction. The dynamic potential in created reality is toward ultimate being in love. As Eric Doyle realized, “the kind of love required to unite humanity as a whole cannot be based on merely moral, juridical, patriotic or historical grounds. To be universal it must be *organic*: based on the personal centers themselves in the uniqueness of their centrality and embracing every particular form of love - familial, national, racial - as reflections of itself. For a person can only love from center to center, from person to person.”

We are busy building a world of science and technology but the world we desire, a world of peace, unity and justice, must begin in the heart. What the mind thinks, the world becomes. It is important how we awaken to a new consciousness of Divine love, discovered in one’s own self-realization and full maturity of “being-with-Christ.” If we are to find a new spirit of the earth, one that can help us realize shared planetary life, then we must understand ourselves in a new way. Competition, specialization and individualism must give way to a new collective energy as the prime energy of love empowering a new world. A transformed consciousness bringing about a transformed world must be rooted in the energies of love.

In this unfinished universe, it is time to connect the insights of Scotus and Bonaventure with Teilhard’s vision of a world struggling to evolve toward more life. Love is always creative,

always stretching into the moreness of new life. Love alone, Teilhard said, can lead us to a new universe. Christ is always a new departure of creative love, as Francis himself realized: “I have done what is mine to do, may Christ teach you yours.” God is seeking to rise up in us, to become some thing more beautiful and more profound in love. Teilhard’s christogenesis means to enter by our transcendent freedom into Christ, to become a New Creation, to enter by faith into the future of every person and into the very heart of creativity itself, into the future of God. As Beatrice Bruteau wrote: If we are asked then: “Who do you say I am?” Our answer must be:

You are the new and ever renewing act of creation.

You are all of us, as we are united in You.

You are all of us as we live in one another.

You are all of us in the whole cosmos as we join in

Your exuberant act of creation.

You are the Living One who improvises at the frontier of the future; and it has not yet appeared what You shall be.⁴³

Notes

¹ Frank, *Constant Fire*, 147.

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³ Francisco J. Ayala, “Biological Evolution: An Introduction,” in *An Evolving Dialogue: Theological and Scientific Perspectives on Evolution*, ed. James Miller (Harrisburg, PA: Trinity Press International, 2001), 13.

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- ⁴ Ayala, “Biological Evolution,” 13.
- ⁵ Peter B. Todd, *The Individuation of God: Integrating Science and Religion* (Wilmette, IL: Chiron Publ., 2012), 61.
- ⁶ Todd, *The Individuation of God*, 61.
- ⁷ Thomas Nagel, “The Core of ‘Mind and Cosmos,’”
http://opinionator.blogs.nytimes.com/2013/08/18/the-core-of-mind-and-cosmos/?_php=true&_type=blogs&_r=1.
- ⁸ James Jeans, *The Mysterious Universe* (New York: Macmillan, 1931), 158.
- ⁹ Philip Goff, “Panpsychism is Crazy, but it is also most probably true.” *Aeon*
<https://aeon.co/ideas/panpsychism-is-crazy-but-its-also-most-probably-true>.
- ¹⁰ Menas Kafatos and Robert Nadeau, *The Conscious Universe* (New York: Springer, 1990),
- ¹¹ Henry P. Stapp, “Quantum Physics and the Physicist’s View of Nature,” in *The World View of Contemporary Physics*, ed. Richard E. Kitchener (Albany: State University of New York Press, 1988), 40.
- ¹² Christof Koch, “A ‘Complex Theory of Consciousness’” *Scientific American* (July 1, 2009) <https://www.scientificamerican.com/article/a-theory-of-consciousness/>.
- ¹³ Christof Koch, “A ‘Complex Theory of Consciousness’” *Scientific American* (July 1, 2009) <https://www.scientificamerican.com/article/a-theory-of-consciousness/>
- ¹⁴ Fritz-Albert Popp, “On the Coherence of Ultraweak Photoemission from Living Tissues,” in *Disequilibrium and Self-Organization*, ed. C.W. Kilmister (Dordrecht and Boston: D. Reidel Publ., 1961); Zohar, *Quantum Self*, 223.
- ¹⁵ Zohar, *Quantum Self*, 223.
- ¹⁶ Pauli, 1952, cited in Atmansacher, 2014, p. 252.
- ¹⁷ Atmanspacher 2014, p. 252.
- ¹⁸ Atmanspacher 2014, p. 285)
- ¹⁹ Teilhard de Chardin, *Phenomenon of Man*, 221.
- ²⁰ Pierre Teilhard de Chardin, *Human Energy*, trans. J. M. Cohen (New York: Harcourt Brace Jovanovich, 1969), 23.

²¹ Teilhard de Chardin, "The Position of Man in Mature and the Significance of Human Socialization," in *The Future of Man*, 211 – 17.

²² Thomas King, SJ, "Teilhard and the Environment," *Ecotheology* 10.1 (2005): 91.

²³ Teilhard de Chardin, *Phenomenon of Man*, 56 – 64.

²⁴ Pierre Teilhard de Chardin, *Man's Place in Nature*, trans. Noel Lindsay (New York: Collins, 1966), 34.

²⁵ Teilhard de Chardin, *Phenomenon of Man*, 56 – 64.

²⁶ Lydia Schumacher, *Divine Illumination: The History and Future of Augustine's Theory of Knowledge*, 126.

²⁷ Ingham, *Scotus for Dunces*, 57-8.

²⁸ Allan Wolter, "Scotus's Individuation Theory," in *The Philosophical Theology of John Duns Scotus*, ed. Marilyn McCord Adams (Ithaca, NY: Cornell, 1990), 68-97; Timothy Noone, "Individuation in Scotus," *American Catholic Philosophical Quarterly* 69 (1995): 527-42.

²⁹ Peter Liethart, "Causality and Pure Nature," *Patheos* (Oct. 16, 2010).
<https://www.patheos.com/blogs/leithart/2010/10/causality-and-pure-nature/>

³⁰ Peter Liethart, "Causality and Pure Nature," *Patheos* (Oct. 16, 2010).
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³¹ Peter Liethart, "Causality and Pure Nature," *Patheos* (Oct. 16, 2010).
<https://www.patheos.com/blogs/leithart/2010/10/causality-and-pure-nature/>.

³² Teilhard de Chardin, *Hymn to Matter*, 53.

³³ Teilhard de Chardin, *Hymn to Matter*, 53.

³⁴ Todd, "Teilhard and Other Modern Thinkers," 8.

³⁵ Thomas of Celano, *The Second Life of St. Francis*, CXLVIII, 196.

³⁶ Martin Laird, "The Diaphanous Universe: Mysticism in the Thought of Pierre Teilhard de Chardin," *Studies in Spirituality* 4 (1994): 206-35 at p. 219.

³⁷ Albert Einstein quoted in Howard W. Eves, *Mathematical Circles Adieu* (Washington, D.C.: The Mathematical Association of America, 2002), 57.

³⁸ Ken Wilbur, *The Essential Wilbur* (Boston: Shambhala, 1998), 136.

³⁹ Albert Einstein quoted in Howard W. Eves, *Mathematical Circles Adieu* (Washington, D.C.: The Mathematical Association of America, 2002), 57.

⁴⁰ Laird, “The Diaphanous Universe,” 219.

⁴¹ Laird, “The Diaphanous Universe,” 222.

⁴²Teilhard de Chardin, *Phenomenon of Man*, 293 – 294; Timothy Jamison, “The Personalized Universe of Teilhard de Chardin,” in *There Shall be One Christ*, ed. Michael Meilach (New York: The Franciscan Institute, 1968), 26.

⁴³ Beatrice Bruteau, “Freedom: If Anyone is in Christ, That Person is a New Creation,” *The Grand Option: Personal Transformation and a New Creation* (Notre Dame, IN: University of Notre Dame Press, 2001), 173.