SAM BRESLAUER

A Theistic Cosmological Theory Aligned with Principles of Thomism: The Holy Infinite Memory Model of Consciousness.

This paper presents a classically theistic cosmological model of consciousness that aligns with Thomistic principles. This discussion begins with a focus on the transcendent identity of God the Father existing in eternity, establishing His simple essence as the pure act of being self-conscious, which defines the mind of God as containing a single holy infinite memory; Himself. However, this model suggests His eternal mind also contains a complex infinite collection of unique self-memories all composed of His immutable essence, framed as the origin of differentiated immaterial information. Guided by St Thomas Aquinas' formulation of hylomorphism, creation is understood as the ongoing process of God re-actualizing His self-memories from an immaterial to material form, requiring God to unfold prime matter as His first creation from nothing but His own pre-existent essence. The production of prime matter, as pure potentiality, allows the Father to breathe His Holy Spirit that contains the Word (foreknowledge of all possibilities / information) to manifest creation. This model suggests that formless prime matter can be described as a zero-dimensional point singularity of infinitely dense pure energy that is imbued with the self-consciousness of the Holy Spirit, which extends into a one-dimensional string that can then fragment into different physical entities. The immanent existence of God's holy infinite memory at the incorporeal centre of all created forms further implies that the universe is structured as an unfolding non-local holographic fractal. Formulating the beginning of creation in this way allows us to see possible connections between Christian doctrine, the primacy of information, string theory and other scientific principles that pose new ways in understanding the immaterial nature of the raw fabric of physical reality. Objections against this model, in relation to its alignment with classical theism, are addressed towards the end of this paper. Fundamentally, fresh perspectives are presented on the nature and origin of consciousness that may shed new light in uncovering the persistent deficiencies in our understanding of consciousness itself.

Key words: God, Holy Spirit, Thomism, essence, consciousness, information, memory, holographic fractal, strings, energy

Introduction

Consciousness has long been argued as existing generally in one of two ways; as an emergent property of biology or a fundamental property of the universe. This model argues that a third theological-based explanation of consciousness needs to be considered, as a central characteristic of God the Father. Therefore, this model assumes that consciousness has its origin beyond the universe in the immaterial realm of eternity and is why the study of consciousness, from a materialistic science perspective, has resulted in limited progress towards our understanding of its nature. This classically theistic view of consciousness is guided by the wisdom offered by one of the greatest Christian theologians to exist; St Thomas Aquinas, resulting in the formulation of a Christian cosmological model that aims to highlight original new ways in which axioms of classical theism can align with current findings in the field of modern science, especially related to information and string theory, that may provide a deeper understanding of the raw building blocks of physical creation and their relationship to the eternal uncreated realm. As a result, new perspectives on the nature and origin of consciousness are offered that may shed new light in uncovering the persistent deficiencies in our understanding of consciousness itself.

This paper begins by framing God's simple understanding of Himself as the dominant feature of His identity and, therefore, His essence is synonymous with His self-consciousness. This enables us to clarify how eternity is nothing but the mind of God that is engaged in a single immutable pure act of being conscious of oneself and therefore, God only has one holy infinite memory that defines His mind; Himself. Hence the model's name; the holy infinite memory (HIM) model of consciousness. Within this memory exists an infinite order of fully actualized incorporeal self-memories all formed out of God's non-compositional essence of self-consciousness, which represents His complexity beyond creation. The HIM model views this collection of uncreated memories as the immaterial origin of information, as God is informed of all His memories simultaneously via His essence. Aligned with Thomism, God's basic pure nature of self-understanding means He is in an unchanging state of bliss and joy from knowing He is of infinite worth as the unrivaled Divine Being of reality, giving us the simple reason He free-willingly chose to create; to celebrate His own love towards Himself.

Guided by St Thomas Aquinas' formulation of hylomorphism, we then turn our focus towards the process of creation. To actualize His memories as physical actualities, God needed to first create prime matter, as formless energetic potential. God could then breathe His Holy Spirit, as the original substantial form, which contains the ordered logic of His self-memories in the form of immaterial information, into the potentiality of prime matter to begin the act of creating. The HIM model proposes that prime matter itself can be described as a zero-dimensional point singularity of infinitely dense pure energy that is imbued with the Holy Spirit's pre-knowledge of all possible actualities, which

fulfils its intended specific purpose by extending into one-dimensional string singularity. This primordial string has the potentiality to infinitely divide into various energy densities to give rise to a universe made of an ever-increasing orderly series of physical forms that reflect their immaterial nature. Formulating the beginning in this way allows us to see possible connections between Christian doctrine, string theory and the primacy of information that pose new ways in understanding the nature of the raw building blocks of physical reality. This model suggests that the whole of God's identity, as the self-conscious holy infinite memory, is present within the immaterial centre of each created piece of information the universe is composed of, further implying that creation as a whole must be structured as a non-local entangled holographic fractal. Objections against this model in relation to its claim of aligning with classical theism are then addressed, especially in regards to its panentheistic features and the notion that the identity / mind of God extends from the eternal realm and simultaneously resides wholly within every aspect of His creation.

Self-consciousness as the simple essence and identity of God.

This model takes a classically theistic position in relation to God's transcendental existence in eternity. God is uncaused, without beginning or end, in a simple unchangeable immovable state, meaning potentiality and composition does not exist beyond creation, which also implies that God is an incorporeal being, as all corporeal things contain composition.[1] Therefore, eternity is viewed as nothing but God's existence as His simple essence, which is to say His essence and existence are the same, as His fundamental identity.[2] In other words, nothing but God's infinite identity exists in eternity. Because God's uniform being is the whole of reality beyond creation, void of potentiality and matter, He is of pure actuality and, therefore, His essence is of a simple pure form. 'Because every agent acts by its form; hence the manner in which it has its form is the manner in which it is an agent. Therefore whatever is primarily and essentially an agent must be primarily and essentially form. Now God is the first agent, since He is the first efficient cause. He is therefore of His essence a form; and not composed of matter and form'.[3]

The essential form of God is not only His identity but is also the one thing that He does, as God is eternally engaged in a single unique act (*actus purus*) that defines His being. Therefore, aligned with Thomistic doctrine, this model proposes that this pure act is God being conscious of Himself, as 'God primar-

1 St. Thomas Aquinas, *Of God and His Creatures*, Burns and Oates: London (1905), p. 44.

2 *Ibid*, p. 47.

3 "New Advent: Summa Theologia" website visited 21st of June 2023 https://www.newadvent.org/summa/1003.htm

ily and essentially knows Himself alone.'[4] 'If therefore anything else than God is the first object of His understanding, something else will be His perfection, and will be nobler than He, which is impossible.'[5] Therefore, in eternity, there is only one thing happening; God being aware of His own infinite and perfect existence. Thus, who God is and what He does are the same. He is the infinite person of existence doing only one thing. This singular action, of God being eternally self-aware, is what defines the whole of eternity according to this model, beyond which, there is nothing.

Another way to frame this description of God the Father is that eternity only contains God as a simple mind made entirely of His own consciousness of Himself, meaning He only has a single infinite memory; Himself. God's knowing of Himself exists as an uncreated eternal memory that, without beginning or end, informs God of His own infinite being. Because form is of pure actuality, this model proposes that God's self-consciousness is His essential form, as a singular holy eternal memory. God's knowledge / memory of His own infinite being is found throughout the Bible when God encounters man, as He frequently mentions His holiness, especially in the book of Leviticus. Therefore, this model is called the holy infinite memory (HIM) model of consciousness.

Because God knows He is the alone King of reality, as the most important and significant possibility of existence, second to nothing, He holds infinite worth, value and, thus, love towards Himself. His self-love is restricted to the awareness He has for Himself, which is to say God's self-love is wholly infinite. His knowing of oneself is synonymous with His love for oneself. 'If therefore our act of understanding, coming to its perfection, yields delight, most delightful must be the act whereby God understands.'[6] Because God shares eternity with no other, He is the object of His own love. 'It is the essential idea of love, that whoever loves wishes the good of the object loved. But God wishes His own good and the good of other beings; and in this respect He loves Himself and other beings.'[7] The HIM model views God's self-consciousness as His natural will to understand Himself, and seeing that He is the source that wields His will and the object in which His will rests then God is in an eternal self-referential state of joy and bliss, as pointed out by Aquinas, 'Joy and Delight are a sort of rest of the will in its object. But God singularly rests in Himself as in the first object of His own will, inasmuch as He has all sufficiency in Himself.'[8]

God is utterly alone beyond creation, meaning He is infinitely self-bounded in the self-reciprocation of His own understanding and love, which entails no

4 Aquinas, *op cit.* p. 82.

5 I*bid*.

6 *Ibid*, p. 143.

7 *Ibid*, p. 145.

8 *Ibid*, p. 143.

movement at all, as the knowing subject and the known object are the same; hence God is of perfect wholeness and completion. Fundamentally, God's mind is a static actuality of self-consciousness, characterized by utter silence and stillness, as all that can be known resides in the knowledge of Himself without ever experiencing the transformative process of becoming. This is why God's nature is often described as being of blissful peace. Suggesting that self-consciousness is the central characteristic of God's identity also allows us to see how other characteristics of His essence can be attributed to this central feature, such as God being the causal Creator and is, therefore, omniscient, omnipresent, omnipotent in relation to creation, which will be explored throughout this paper.

God's simple holy infinite memory contains a complex order of an infinite many self-memories.

The HIM model suggests that God's simple mind of self-consciousness is simultaneously infinitely complex, as His essence, the singular infinite possibility that defines eternity, contains an infinite many possibilities made from the form of the holy infinite memory. Thus, it is understood that God perceives this infinite sequence of possibilities, or self-memories, through the self-consciousness of the holy infinite memory and, therefore, knows them all as His essence. 'But in God's knowledge many things are known in one, not by many different presentations, but by that one species, or presentation, which is the essence of God.'[9] God's holy infinite memory of Himself is the only true and perfect whole possibility of reality and is the foundational essence for each of His memories and, thus, the whole of God's self-consciousness is within each memory. This means God instantaneously knows the whole infinite series of immaterial forms that exist within His eternal essence.

Although each memory is of unique formation, each is formed of the only form of eternity; God's self-consciousness. This implies that this infinite store of memories are immaterial, uncreated and fully actualised. They have eternal existence in spirit form as an infinite complete collection of distinctive impression within the only substance present beyond creation; the spirit of God. Thus, infinite possibilities are enfolded within, as a natural aspect of, God's essence. Edith Stein captured this notion of God's character in the following quote, 'This being is all that it is in the highest measure of being, or more correctly, it is measureless (it is the very measure by which all is measured)- it is *pure act*. In it nothing is shut, nothing remains unfolded; it is in absolute openness, illuminated in itself and through itself; that is, it is light itself- it is *pure spirit*.'[10]

To have an infinite many self-memories, they must all be distinguishable and

9 *Ibid*, p.113.

10 Moran, D. 'Being and Nothingness'. In Meister Eckhart and the Tradition, (2023), p. 7.

individualised, which reflects the uniqueness of God Himself being the only infinite individual of reality, allowing God to discern each memory in its totality. Each memory acts to imitate the absolute perfection from which they are made. 'God in His essence, as in a sort of exemplar medium, knows other things. But as He is a being of infinite perfection, there can be modelled upon Him infinite copies with finite perfections, because no one of these copies, nor any number of them put together, can come up to the perfection of their exemplar; and thus there always remains some new way for any copy taken to imitate Him.'[11] Each self-memory directly informs God's consciousness, as they are all made out the very consciousness they are informing. Hence, God's self-memories can be described as discriminant pieces of immaterial information, inseparable to the pure consciousness God has of Himself. Many physicists agree that information is the fundamental building block of reality and is what gives rise to energy, matter, space, time and, thus, a deeper understanding of information holds the key to unify general relativity with quantum mechanics.[12]

This model assumes that God sees all such variation within His essence silently through an immutable perceptual lens of self-identity and infinite worth, which is to say He knows the innate importance and meaning of each individualised memory via the wisdom of knowing His own perfection. Therefore, it is impossible for God to view all such variation within His own mind as compositional, as all self-memories are seen with the understanding that they are all composed entirely of the singular divine form. Thus, God perfectly recognises His own essence within all such differentiated forms that make up the infinitely complex memory structure of His own mind.

> But the divine mind understands by virtue of no impression other than its own essence. At the same time the divine essence is the likeness of all things. It follows therefore that the concept of the divine understanding itself, which is the Divine Word, is at once a likeness of God Himself understood, and also a likeness of all things whereof the divine essence is a likeness. Thus then by one intelligible impression (species intelligibilis), which is the divine essence, and by one intellectual recognition (intentio intellecta), which is the Divine Word, many several objects may be understood by God.[13]

God loves all His self-memories with the same infinite worth and holiness He holds towards Himself, which is to say each memory is infinitely meaningful to Him. It is the self-recognition and self-love that God perceives in each

11 Aquinas, *op. cit.* p. 113.

12 Ananthaswamy,A. 'Inside Knowledge: Is Information the Only Thing that Exists?', 29 March 2017, http://www.newscientist.com/article/mg23431191-500-inside-knowledge-is-information-the-only-thing-that-exists/

13 Aquinas, *op. cit.* p. 88.

unique impression within His complex mind which makes all His memories of invaluable worth to Him, for each provides a unique meaning that contributes to the complex identity of infinite possibilities that God possesses. Because God knowing Himself is the only occurrence that ever happens beyond creation, God has a perfect comprehension of His entire infinite collection of memories all at once. God sees the infinite chain of His interrelated possibilities simultaneously within His pure act of being conscious of oneself. 'God is attentive to behold His essence perfectly, which is to see it to the whole reach of its virtual content, which includes all things. God therefore, in beholding His essence, discerns at once all things'.[14] By perfectly knowing the entirety of the whole, all its implied parts are explicitly known all at once. In this one simple eternal act, God has a unique loving, intimate and orderly relationship with each memory based on the individualised meaning they add to God's complex knowledge of Himself, which requires God's mind of infinite self-memories to be harmoniously entangled and logically organised, completely void of chaos.

God's self-understanding is the cause of creation, which He chooses to create via His free will.

Aligned with classical theism and Thomism, the HIM model supports the doctrine that creation is not necessary for God. God requires nothing else than His own presence, which does not depend on the actualisation of creation. 'But God has no need of other things, seeing that His perfection depends on nothing external to Himself, and when He wills other things for Himself as an end, it is not that He needs them, but only that this reference befits His goodness.'[15] Therefore, this model views God as the omnipotent agent that caused creation via His free will to choose to do so, based on a single simple reason; to celebrate the infinite worth and value of His own existence. God's self-consciousness entails His will and desire to rejoice in His own greatness, as a mind that understands the good of the object understood must be a mind that is innately capable of willing good. Thus, His self-consciousness and His will share no distinction. 'God has will inasmuch as He has understanding. But He has understanding by His essence, and therefore will in like manner.'[16]

This celebratory will, as the reason for creation, is referred to throughout scripture as God's glory. Isaiah states God's reason for creation clearly; 'everyone who is called by my name, whom I created for my glory, whom I formed and made' (Isaiah 43:7). Creation is, therefore, a glorious expanding growth of God's overflowing love for Himself. This is the entire reason why God, although

14 New Advent, *op.cit*.

15 Aquinas, *op cit,* p. 156.

16 *Ibid*, p. 121.

already complete, whole and perfect, free-willingly chose to create creation. Because He and nothing else exists, God has the complete freedom to create within the infinitely expansive grace He holds towards Himself. This model, thus, agrees with the argument that creation had a definitive 'beginning point', which is an observation becoming more apparent in the modern world of material science.[17]

God uses His self-memories existent within the Holy Spirit, as the Word, to create the material world.

God's Holy Spirit is naturally cognizant of the entire spectrum of material effects that creation can be composed of, as uncreated immaterial actualities that have always existed in His mind formed within the holy infinite memory. This notion aligns with how Aquinas views the relationship between cause and effect, as effects are pre-existent within and, thus, inseparable from their efficient cause.[18] God's knowledge of His own infinite possibility, within the context of this model, is known as the Word, as referred to in the Holy Bible possessed by the Holy Spirit of God. 'In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God.' (John 1:1-2) This opening sentence from the gospel of John makes it clear that in the beginning there was both God and the Word, but both are God. The HIM model interpretation of this quote is, in the beginning, there was only the essence of God in existence, which contains two aspects of His infinite character; His simplicity of knowing singularly Himself and His complexity of knowing the whole infinite many immaterial impressions that exist as a likeness to Himself within His form / essence (the Word)[19].

17 Meyer, S.C. 'Three Major Scientific Discoveries in the Past Century that Point to God,' *The Federalist,* April 2nd, 2021, https://stephencmeyer.org/2021/04/02/three-major-scientific-discoveries/
Meyers points out in his article that the most compelling piece of evidence that indicates the universe began at some point in the past is the emission of 'red-shifted' light from distant galaxies, which shows the universe is not only expanding but is doing so at an accelerated rate. As we travel back in time and reverse this process, the evidence points to the universe being born out of a singular explosive definitive beginning.

18 Soars, D. 'Creation in Aquinas: ex nihilo or ex deo?,' *New Blackfriars* Vol 102, Issue 1102, p. 957. http://doi.org/10.1111/nbfr.12603 William Hasker points out that for God's knowledge to span the completion of what has been and what is yet to come then there is a requirement for an inner representation of such possibilities on God's part (Matthews Grant, W. 'Divine Simplicity, Contingent Truths and Extrinsic Models of Divine Knowing,' *Faith and Philosophy: Journal of the Society of Christian Philosophers* (2012), 29, 268.

19 This following passage by Anselm of Canterbury makes it clear how God possessed a pre-understanding of infinite actualities before any created thing was made; 'But I seem to see something that forces me to distinguish carefully the sense in which the things that were made can be said to have been nothing before they were made. After all, there is no way anyone could

'If the Holy Spirit is "poured out" on the whole creation, then he creates the community of all created things with God and with each other, making it that fellowship of creation in which all created things communicate with one another and with God, each in its own way.'[20] Thus, when the Holy Spirit of God speaks the Word and breathes creation into existence, He speaks of pure logic that aligns with His inner life of infinite actualities, otherwise known as the Logos. Another way to state this axiom of Christianity, within the context of this model, is that creation is the result of God, as the Holy Spirit, re-actualizing His pre-existent incorporeal self-memories with the potentiality of matter so that they can be realised physically and celebrated as a material reality, which is highlighted in this quote by Jürgen Moltmann; 'That we have to understand every created reality in terms of energy, grasping it as the realized potentiality of the divine Spirit.'[21] Therefore, the Holy Spirit is the creative aspect of God's character. 'If the Father functions as the source of being and the Son bears the claim of God into the world, the Spirit's function is to complete the task of creation so that the community of the triune God comes into fullness. Spirit is the dynamic both by which God brings creation into existence and by which it reaches the goal of new creation.'[22]

Fundamentally, God's eternal act of being purely consciousness of oneself causes creation, which is to say the pre-existence of consciousness has a causal effect on reality that unfolds material actuality from potentiality. This notion is an underlying feature of quantum mechanics which argues that quantum particles exist in a potential state of superposition, allowing quantum objects to exist simultaneously in multiple forms / places until an observation has been made, which effectively collapses the potentiality of superposition into a classical singular determined actuality; aka the observer effect.[23] However, to begin collapsing physical reality into existence, made in the image of His actualised spiritual self-memories, God's first creation must have been a substance

make something rationally unless something like a pattern (or to put it more suitably, a form or likeness or rule) of the thing to be made in the reason of the maker. And so it is clear that what they were going to be, and what sorts of things, and how they were going to be, was in the reason of the supreme nature before all things were made.' (McFarland, I.A. *From Nothing: A Theology of Creation*, Louisville, Kentucky, Westminster John Knox Press, (2014) p. 90). This passage implies that, as God's spirit creates, He is doing so with the eternal knowledge of an uncreated order that is intrinsic to His own life.

20 Daneel, M L, *African Earthkeepers: Environmental Mission and Liberation in Christian Perspective*, Pretoria: University of South Africa (1999) p. 207.

21 *ibid*

22 Pinnock, C.H. 'The Role of the Spirit in Creation,' *The Asbury Theological Journal* (1997) 52:49.

23 Hameroff, S. 'Time, Consciousness and Quantum Events in Fundamental Spacetime Geometry', *The Nature of Time: Geometry, Physics and Perception. NATO Science Series (Series II; Mathematics, Physics and Chemistry)* (2013) 95*:* 77-89

of pure potentiality that can be inhabited by God's Holy spirit to reform His metaphysical memories as the physical universe.

The hylomorphic process of creation

The HIM model aligns with Aquinas's perspective on the hylomorphic nature of physical things.[24] Let's first look at how scripture makes clear how God first had to create prime matter to allow His inner life to physically come to fruition as creation. We will then review some of the core principles of Thomistic hylomorphic theory of substantial form and prime matter and unpack how such principles underlie the integrity of the HIM model. This model of consciousness completely affirms the Christian doctrine of *creatio ex nihilo*; creation from nothing. This axiom implies that there was not a pre-existent eternal material that God used to shape creation but, instead, God first created the raw material of which all forms of His immaterial inner-structure of self-memory could then be physically moulded of. Thus, because the HIM model is based on the notion that nothing exists beyond creation but God and His Spirit, it can more specifically be stated that creation comes from nothing but God, implying that God first created the material of creation; aka prime matter. This is consistent with how Theophilus of Antioch, a 2nd century Bishop who championed the teachings of *creatio ex nihilo*, interpreted the opening verse of the Old Testament.

Aligned with the grammar of the ancient Greek translation of the Hebrew Scriptures, known as Septuagint, Theophilus viewed the first verse, 'In the beginning God created Heaven and Earth,' as a separate sentence which describes the first creative act of God bringing the basic substance of heaven and earth into being.[25] The following verse, according to the Septuagint interpretation, describes the state of creation once the basic substance of prime matter has been created, which reads; 'The earth was invisible and unformed, and darkness was over the deep, and the spirit of God moved over the waters.' Theophilus viewed these opening sentences of scripture to be a statement of how God first created matter itself from which He would shape the universe of a diverse many forms.[26] The HIM model is in complete agreement with this interpretation, as

24 Hylomorphism was first formulated by Aristotle and further developed by various students of his and Scholastic philosophers, which views all physical objects of reality consisting of two intrinsic principles; substantial form and primary matter. St Thomas Aquinas adopted many of the core principles behind the doctrine of hylomorphism, which he formulated further in his '*De ente et essentia* (Of Being and Essence)'. A commentary on Aristotle's *Physics and Metaphysics* ('Britannica', website visited 15th of Dec 2023, https://www.britannica.com/topic/hylomorphism)

25 McFarland, I.A. *From Nothing: A Theology of Creation*, Louisville, Kentucky: Westminster John Knox Press (2014), p 2-3.

26 *ibid*

this model proposes that, because nothing but God existed before the creation of the first physical thing, then God must have used nothing but His own Holy Spirit to create prime matter. This implies that prime matter is completely imbued with and nested within the self-consciousness of the Holy Spirit, meaning prime matter contains the spiritual knowledge of all possible immaterial actualities. Thus, in the context of the HIM model, the original uncreated form (essence) of the Holy Spirit, in relation to prime matter, could be referred to as the 'substantial form', which is consistent with St Thomas Aquinas' approach to Hylomorphism, as will be discussed. Therefore, we can view the Holy Spirit as the original divine substantial form that creation itself depends upon.

To explicate further in regards to how potentiality in creation invisibly harbours God's eternal actualised immaterial self-memories yet to be physically actualised, let us look at some of the core axioms of Thomistic hylomorphism, summarised by Rev. Nicanor Pier Giorgio Austriaco with elaborations on how the HIM model aligns with such principles. In the beginning of creation, God created prime matter as a formless, dark and empty substance, which implies that it lacks actuality and is of pure potentiality. Prime matter, as a pure potentiality, is given its 'being' (actuality) by the substantial form. 'If prime matter is the metaphysical principle that specifies the potency inherent in an existing thing, then substantial form is the correlative metaphysical principle that specifies the actuality of that thing. It is form that makes a thing of a natural kind, what it is.'[27] This quote emphasises how potency itself is non-determinant and lacks any power to actualise as a form by itself. As Aquinas explains it, 'prime matter has substantial being through form…else it would not be in act. Therefore, in the nature of things, matter cannot be found without form.'[28] Potentiality enjoys existence only if it is coupled with substantial form, which informs the formlessness of prime matter and provides the logical boundaries of a specific structure for a particular function that prime matter can then take the shape of.

Although prime matter is associated with potentiality, its beingness / existence implies it has a nature of actuality, which infers formless potentiality cannot exist without the consciousness of God 'upholding' it. As noted by Aquinas, 'Between actuality and potentiality such an order obtains, that, though in one and the same being, which is sometimes in potentiality sometimes in actuality, potentiality is prior in time to actuality (although actuality is prior in nature), yet, absolutely speaking, actuality must be prior to potentiality, as is clear from this, that potentiality is not reduced to actuality except by some actual being.'[29] This initial creation of prime matter, as the first created actuality of reality, is

27 Austriaco, N.P.G. *The Hylomorphic Structure of Thomistic Moral Theology from the Perspective of a System Biology*. Dissertation submitted to the Faculty of Theology at the University of Fribourg (Switzerland) for the Degree of Doctor of Sacred Theology (2015) p. 34.

28 *Ibid* p. 30.

29 Aquinas, *op cit,* p. 176.

referred to as pure conscious energy (PCE) in the HIM model, which will be discussed further in coming sections.

As God's memories become physically actualised as a part of creation, by the Holy Spirit (substantial form) shaping prime matter, they are designed with a specific purpose and function that orientates each created possibility towards fulfilling their intended contribution to a wholly entangled and organised orderly material reality. 'More specifically, substantial form is the principle that explains the determination, the nature, the operation, and the unity of a composite thing. It is also the principle that specifies the end of a thing of a natural kind, the principle that makes a thing tend by nature towards its perfection.'[30] This explanation of the substantial form makes it clear how it holds the completed knowledge of the full actualisation for each created possibility. This means the substantial form of a particular material object contains information about how it completes its purpose. 'Substantial form is the metaphysical principle of finality that explains the directedness, the teleology, of things.'[31] In other words, the substantial form already knows the determination of each possibility it creates, as the future of the whole of creation is already fully actualised within it, as God's holy infinite memory.

The notion that God gives His spirit and its eternally existing immaterial contents, as information, to creation as He creates prime matter is also implied in the following passage, 'The act to which prime matter is in potency is the substantial form. Therefore, the potency of matter is nothing else but its essence.'[32] Thus, the substantial form allows potency to be an actuality, by providing prime matter with an essence that invisibly nests the enfoldment of the whole infinitely complex pattern of incorporeal information (actualised self-memories) that have their belonging in God's self-consciousness. Therefore, at the singular moment of creation, we have the pure act of God along with the pure potency of prime matter, which represents the opposite of God's actuality. However, upon its unfoldment into existence, this pure potential is simultaneously wholly infused with God's form, giving us a beginning point that allows for the greatest possible spectrum of material forms to collapse physically from the immaterial memories of God's mind via the infinite potentiality of prime matter.

30 Austriaco, *op. cit*. p. 24.
31 *Ibid*, p. 38.
32 *Ibid*, p. 29.

The infusion of the Holy Spirit and prime matter at the beginning of creation means God is silently present and inseparable with His creation.

The self-consciousness of God, as the essence and cause of prime matter, is, thus, present with all contingent created effects that logically unfold from this first effect, rendering God as being omnipresent with physical reality. This way of God relating to His creation doesn't deny ontological distinction between cause (God) and His effects (creation) but indeed supports the reality of this relationship, as 'it is precisely the *non*-contrastive nature of the distinction which allows God, as cause, to be both transcendent to *and* immanent to the world.'[33] Consistent with the origin of consciousness being presented by this model, there are, and have been, many prominent scientists and philosophers who are continually finding more evidence that supports the idea that consciousness itself may possibly be derived from an all-pervasive all-knowing universal field that inhabits the whole universe.[34]

God, therefore, immanently experiences every physical possibility of His own making and, thus, knows the created realm by which He knows Himself and His memories existent in His eternal essence; through a lens of silent love and divine worth. He knows every individual possibility of creation is a physical manifestation of His essence, as beings within His being. 'As then by one act He understands Himself and other beings, in as much as His essence is the pattern of them all.'[35] This insight into God's perceptual outlook upon creation is also reflected in Aquinas's work when he states, 'But God with His understanding understands Himself in the first place, and in Himself understands all other things'[36] and 'He knows them (things) more perfectly and in a more noble way, because nothing but His essence is the principle of His cognition.'[37] In this context, we can understand more deeply the truth behind what Andrew Klavan calls the 'Great Speculation'; a two part conjecture on the presumed inner reality of how God values the subjective perceptions experienced by His creatures. Klavan explains, 'one, other people's inner lives are as real to them as yours is to you and, two, all inner lives are of equal value to God on high.'[38] The

33 Soars, *op. cit.* p 957.

34 Dirk K. F. Meijer, "Universal Consciousness: Collective Evidence on the Basis of Current Physics and Philosophy of Mind, Part 1" (October 2018), http://www.researchgate.net/publication/328538224_Universal_Consciousness_Collective_Evidence_on_the_Basis_of_Current_Physics_and_Philosophy_of_Mind_Part_1 .

35 Aquinas, *op. cit.* p 124.

36 Aquinas, *op. cit.* p 123.

37 Hubler, J.N. *Creatio ex Nihilo: Matter, Creation, and the Body in Classical and Christian Philosophy Through Aquinas*, Publicly Accessible Penn Dissertation, 980 (1995), p. 166, https://repository.upenn.edu/entities/publication/5e90cd8d-bc84-4d2f-9165-ddd8e2aa8ac1

38 Klavan, A. 'The Spirit of de Sade', *The American Mind: A Publication of the Claremont Insti-*

HIM model interprets this insight into God's perception upon His creation as God seeing our inner-lives through His self-reference of infinite value and, thus, knows the equal (infinite) worth of the reality creating perception we generate with our God-given consciousness.

Experiencing creation through a lens of self-identity and infinite worth means God's omniscience over the whole of creation is done so in a state of primordial still silence, without any requirement of mental propositions to make sense of what He perceives. Thomas D. Sullivan suggests that God's knowledge is non-propositional, as he points out that 'God knows the world in a way we cannot adequately represent in any proposition' and 'God knows the whole of it, in all its individuality. He displays occurrences to Himself through a single intellectual act, without relying on impoverished abstraction, and since He is beyond space and time, without temporal self-reference.'[39] According to the HIM model, this non-propositional intellectual act that Sullivan refers to is God's silent understanding that all is of one's own essence and, thus, His self-reference, while observing creation, is atemporal (eternal). Experiencing the world through a perceptual lens of silent eternal self-recognition is also consistent with Thomistic thought, as Aquinas makes it clear that there is no passion in God. 'In every passion the subject is more or less drawn out of his essential condition or connatural disposition: which is not possible in the unchangeable God.'[40] This quote refers to God's essential condition, which the HIM model views, as already mentioned, is a state of knowing all is essentially self and therefore, aligned with Thomism, includes experiences of love, joy and delight as such experiences do not involve anything inconsistent with divine perfection.[41] Therefore, the HIM model argues that the whole of reality could be conceived as a single atemporal self-conscious perceiver (God) creating an inseparable temporal information-laden physical perception (creation) from the spiritual memories contained within His eternal essence, for the purpose of His own delight.

tute, 23rd May 2023, https://americanmind.org/features/the-spirit-of-de-sade/

39 Sullivan, T.D. 'Omniscience, Immutability, and the Divine Mode of Knowing', *Faith and Philosophy* (1991), 8, 30. DOI: 10.5840/faithphil1991815.

40 Aquinas, *op. cit*. p 141.

41 Aquinas, *op. cit.* p 143.

The full actualisation of the first moment of creation according to the HIM model: Prime matter, as a zero-dimensional point of pure conscious energy, materialises its potential by extending into a one-dimensional energetic string.

The HIM model proposes that the creation of prime matter is presented as a zero-dimensional point of pure conscious energy (PCE). PCE is a point singularity of infinite density that is completely void of material form, as it lacks any physical dimensions. This is consistent with Aquinas' thought, who viewed prime matter as utter formlessness; 'Created matter is formless so that it may be accommodated to different forms.'[42] This initial point of creation can't divide itself, as it is impossible to divide a zero-dimensional object, which is what PCE must do to create various forms of prime matter. Thus, to divide itself into an infinite many unique related parts it must form itself into an object with one dimension, as one can be divided infinitely. Therefore, this singularity of PCE extends into a one-dimensional string of PCE, which simultaneously gives rise to the spatial dimension of length, as the first piece of created information that is poised to act as the fundamental building block of all created things. The HIM model refers to this one-dimensional object as the string singularity. This process of PCE transforming from 0 to 1 dimension occurs according to God's logic (the Logos) and, thus, instantaneously actualises its preordained God-given purpose of forming into a shape that allows for infinite divisibility.

Therefore, the HIM model suggests that all matter is essentially made from one-dimensional strings, derived from this primordial string singularity, that carries the consciousness of God and is, thus, the micro-physical medium through which God is able to divinely act upon His creation. Carl Gillet points out that for divine action to be compatible with the physical sciences, then it must be microphysically realised[43] and John Polkinghorne, theorised how the ultimate cause of the universe, resulting from God giving away His own love into something other than Himself, allows the movement of God's love through the generation of creation, which permits a flow of information from God to the universe by which God guides it providentially.[44] Polkinghorne, thus, pondered that God's divine action upon creation must shape the course of its evolution through the input of some generalised form of information to exert direct influence into the open grain of nature.[45] The HIM model presents possible solu-

42 Austriaco, *op. cit.* p. 29.

43 Gillet, C.'Physicalism and Panentheism: Good News and Bad News', *Faith and Philosophy* (2003) 20, 8.

44 Silva, I. 'John Polkinghorne on Divine Action: A Coherent Theological Evolution', *Science and Christian Belief* (2012) 24, 22.

45 *Ibid*, p. 25.

tions for these deep ponderances raised by Gillet and Polkinghorne.

It is also apparent that the HIM model aligns with a general principle of 'string theory'; that the fundamental building blocks of our physical description of nature are one-dimensional extended objects / strings.[46] More specifically, the HIM model reflects notions presented by Dejan Stojkovic's string theory model; 'the Vanishing Dimensions Theory'. In Stojkovic's cosmological model, as we regress back in time, the dimensions present vanish until we are left at a 'beginning point' where the size of the universe is zero-size but as we move forwards from this point, at the shortest distances, space becomes one-dimensional then at a certain critical length space becomes two and then three-dimensional.[47] Stojkovic's theory also implies that because the universe evolves from a zero-size of no fixed number of dimensions then it should possess unlimited potential for further dimensional developmental.[48] Therefore, the HIM model agrees with Stojkovic and string theory in general that the universe should contain many more dimensions to account for the variety of forms, especially types of particles, that make up the universe.

It is important to notice how PCE acts to imitate God's essence in eternity. For PCE to take on various forms it must fragment itself into different energetic densities and, because the string singularity is of infinite density, it has the potential to continually produce new densities (forms) for PCE to fragment into. So, although words such as division and fragmentation are being used to describe how PCE transforms into different physical entities, fundamentally PCE itself is zero-dimensional in nature and is, thus, indivisible, and unchangeable, just like God's essence. New theories are emerging in science that suggest fragments of energy may be the ultimate building blocks of the universe, more fundamental than waves or particles.[49] However, to be clear, this model argues that the information that makes up the consciousness of the Holy Spirit combined with pure energy to create PCE is a more accurate description of the true indivisible building block of the universe.[50]

46 Gasperini, M. 'String Theory and Primordial Cosmology,' *Springer Handbook of Spacetime,* (30th Dec 2014) http://doi.org/10.48550/arXiv.1402.0101 .

47 Stojkovic, D. 'Vanishing Dimensions: Theory and Phenomenology,' *Romanian Journal of Physics* (2013) 57(5)

48 *Ibid*.

49 Childers, T. 'New Theory Casually Upends Space and Time,' *Popular Mechanics,* 10th of Dec, 2020. https://www.popularmechanics.com/space/deep-space/a34934990/new-universe-theory-fragments-energy/

50 According to the HIM model, while PCE takes various forms, it essentially will always retain its memory as an indivisible point of formless energy. Therefore, 'between' the memory of PCE, as a zero-dimensional point, and its actualized fulfillment into a one-dimensional string lies the enfoldment of an infinite order of entangled pieces of immaterial bits of information (between 0 and 1 exist an infinite many possible values) that are structured in line with God's eternal understanding and love for Himself.

The physicist John Wheeler was an enthusiastic proponent of the explanatory power of 'information' as the primary building block of the universe. He was famous for coining the term 'it from bit,' which symbolized the idea that every 'thing' of the physical world has, at its deep vast bottom, an immaterial source and explanation and, thus all material things are information-theoretic in their origin.[51] Wheeler conceived the universe as a great cyclic organized information system, whereby the presence of an all pervasive knowing field, existing in the quantum realm, as a unified 'storage and creative' force, communicates with all animate and non-animate existent entities, generating information-based 'collective memories' that continuously grow towards greater configurations of informational complexity.[52] Wheeler theorized that, in order for this all-pervasive conscious field to have unlimited storage capacity for information-based memories, then such information must be structured elegantly as fields interconnected holographically in a single structure of consciousness.[53] The HIM model presented in this paper largely concurs with the informational memory-based structure of universal consciousness that envelopes the whole of the universe Wheeler describes. However, the HIM model views this 'great knowing all-pervasive field' as the memory field of PCE left over from the first moment of creation, of which all created possibilities have since been unfolding and nesting themselves within.

For a universe to accommodate the parameters described in the previous paragraphs, where the Word breathed by the Holy Spirit manifests as an unlimited flow of conscious energy constantly taking different forms of increasing complexity as material information, the HIM model aligns with many current scientific theories that suggest the whole universe is a great hierarchically organized non-local holographic fractal[54]. The HIM model suggests the non-locality of the universe[55] can be attributed to its true localisation in God's mind,

51 Wheeler, J.A. *Information, Physics, Quantum: The Search for Links* Princeton University: Physics Department (1990) pp. 309-336.

52 Breslauer, S. 'Comparison of Fractal of Self Model of Consciousness with Other Model', *Journal of Consciousness Exploration and Research* (2020) Vol 11, no 2.

53 Meijer, D.K.F. 'The universe as a Cyclic Organized Information System: John Wheeler's World Revisited,' *NeuroQuantology (* 2015) 13(1)

54 Some prominent examples of the cosmological model that are based on a holographic structure of the universe are as follows; Bohms's Implicate Order model (Bohm, D. 'Wholeness and the Implicate Order', United Kingdom: Routledge (1980)), Wheeler's Cyclic Organized Information System Model (Meijer, D. 'The Universe as a Cyclic Organized Information System. John Wheeler's World Revisited', *NeuroQuantology,* (2015) 13, 57-78), Anjamrooz, McConnel & Azari's The Cellular Universe model (Anjamrooz, S. H., McConnel, D. & Azari, H., 'The Cellular Universe: A new Cosmological Model Based on the Holographic Principle', *International Journal of Sciences* (2011) 6, 2175-2183) and Di Biase's Holoinformational Model (Di Biase, F. 'Quantum Information Self-organising and Consciousness: A Holoinformational model of Consciousness', *Journal of Nonlocality (2013*) 2(2)).

55 John Clauser, Alain Aspect and Anton Zeilinger won the 2022 Nobel Prize in Physics for

which is to say it is localised in eternity. Because creation began from a starting point of pure energetic potentiality that possesses God's implicit knowledge of all possible forms, we can understand this unfoldment happening from a spiritual state of completion. Therefore, as discussed, the memory of the whole (the holy infinite memory) must be present in each physical effect materialised within creation. A fractal is an infinitely complex pattern of self-similarity which can continue creating unique parts that have the same statistical character of the whole[56], which shares similarities with the structure of a hologram, whereby it's lower dimensional surfaces can possess enfolded information about related higher dimensional surfaces within it.[57] Therefore, if creation evolves as a holographic fractal then it would possess the structural integrity required for the memory of the whole to exist in each of its parts.

Given God's sole existence in eternity with His pre-knowledge of all actuality, He already had the perfect design for creation, giving Him the exact understanding of how to unfold material reality in His own image with its amazing fine-tuning parameters. This implies that there is only one perfectly ordered way to create an infinite sequence of God's possibilities, as opposed to the popular modern idea of a 'multi-verse' that infers there are various many ways to sequence possibilities in multiple co-existing universes. Stephen C. Meyer, a philosopher of science, highlights the fact that such a finely tuned universe is a major piece of evidence that a transcendent intelligent designer must exist as the supreme cause behind such an orderly creation.[58]

Objections against the HIM model, as a classically theistic model, and responses.

1) According to traditional theistic perspectives, consciousness itself is generally considered to be a contingent aspect of creation.

Panpsychism seems to be a clear feature of the HIM model, as panpsychism includes any cosmological model where 'mind' is a foundational feature of the universe.[59] The HIM model is based on the notion that all of reality is funda-

designing and carrying out experiments that confirm the non-locality of the universe (Garisto, D., 'The Universe Is Not Locally Real, and the Physics Nobel prize Winners Proved It', *Scientific American (*2022) Oct 6.

56 'Fractal Foundation', website visited 20th November 2023, https://fractalfoundation.org

57 Siegal, E., 'Ask Ethan: Is Our Universe a Hologram?' *Big Think,* Oct 14th 2022, https://bigthink.com/starts-with-a-bang/universe-hologram/

58 Meyer, *op. cit.*

59 Leidenhag, J. 'Panpsychism and God,' *Philosophy Compass*, 17, 2, http://doi.org/10.1111/

mentally 'of God's mind' and, thus, is a panpsychic view of reality. According to Leidenhag, the Monadology model formulated by Gottfried Willhelm Leibniz is a traditional monotheistic panpsychic model[60] and, because the HIM and the Monadology model share significant overlap[61], we can also view the HIM model under the same category. However, it is presumed that because Leibniz was a traditional Christian theist, he likely viewed 'consciousness itself' to be a contingent part of creation just like matter.[62] This is a point of difference between the Monadology and the HIM model, as the HIM model argues that God's Self-consciousness is His immutable essence that defines His identity and uses to form the world, which is a relatively new contention, although supported by Thomism, this paper presents.

2) The HIM model is panentheistic which opposes classical theism.

Panentheism is a philosophical attempt to grasp God's contrasting nature of being immanent yet transcendent in relation to His creation. Basically, panentheism argues that the world is in God and, thus, the world *is* God without ontological distinction and, therefore, argues that God and creation are co-dependent**.** Such notions run directly against the teachings of classical theism. However, panentheism also asserts that God is the Creator of and is, therefore, more than the world, thereby providing a resolution for the 'immanence and transcendence' problem.[63] The HIM model asserts that God's causal signature, as His consciousness, is the essence that upholds the existence of the whole of creation and is, thus, present in all physical possibilities. Therefore, creation is 'in God', as a physical inner-extension of His metaphysical mind. Therefore, the HIM model certainly presents some panentheistic undertones, but also opposes some core axiomatic features of panentheism. Let us compare the two approaches using the definitions provided by Mikael Stenmark. According to Stenmark's criteria, the HIM model would present as a 'traditional theistic' model, as the following axioms apply;

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60 *Ibid*, p. 7.

61 Sam Breslauer has published a model of consciousness called the Fractal of Self (FOS) in the Journal of Consciousness Exploration and research (JCER) in 2019, of which the HIM model is a refinement of and, thus, both models share many of the same axiomatic principles. In 2022 Breslauer published another paper in JCER called 'Comparison of Leibniz's Monadology and the FOS Model', which exemplified how the FOS model and Gottfried Willhelm Leibniz's Monadology shared significant overlap. Therefore, the HIM model and the Monadology model also share significant overlap.

62 Leidenhag, *op. cit*. p.7.

63 Stenmark, M. 'Panentheism and its Neighbors,' *International Journal for Philosophy of Religion,* 85:23-41, p. 26, http://doi.org/10.1007/s11153-018-9687-9

God is ontologically distinct from the world;

God is the creator of the world, so the world depends on God for its origin;

God could exist without this world or without any other world, so God in no way depends on the world for God's own existence;

The continuing existence of the world depends on God's ongoing creative activity;[64]

Panentheism agrees with axioms (2) and (4) but is in opposition to (1) and (3). Panentheism assumes that creation is an essential part of God's existence and views the world as God's body of which He depends on for His existence[65], which the HIM model refutes. However, the HIM model does suggest that creation is nested within the eternal immaterial reality of God being conscious of Himself, implying that God's essence of self-consciousness is present within every physically actualized piece of information the universe is made up of, which aligns with panentheism. Therefore, we could say the HIM model is a classically theistic cosmological model with panentheistic features.

3) The HIM model suggests that creation is a part of God's identity, which runs against the grain of classical theism that emphasizes the identity of God as transcendent and distinct from creation.

The HIM model supports the understanding of God's aseity; that He is completely self-sufficient and perfectly content within Himself and, thus, does not require creation to complete or add to His infinite identity. Thus, He creates not out of necessity but as an act of joy, celebrating His singular existence in eternity and is done so purely for Himself, as fundamentally He, as essence, is the only individual of reality with no other. Therefore, His reason for creating does not contradict His aseity, as creation is a physical projection of His memories within His eternal essence, which creates the impressions of 'other beings', although each is made from the immutable self-consciousness of the Supreme Being. Thus, creation is inseparable from eternity as it unfolds inside this pre-existent reality of God's memory of Himself. Therefore, it is reasonable to argue that, from God's perceptual frame of eternal self-reference, He recognises His essence (identity) in all other beings of creation. In this sense, the HIM model views creation as an extension of God's identity.

64 *Ibid*

65 *Ibid*, p. 27.

Conclusion

The purpose of this paper was to focus on the nature and origin of consciousness, by leading a theological and scientific discussion that emerges when we work from Thomistic axioms of reality. Starting from such principles, this model aimed to highlight some overlooked connections between the reality of God the Father, His Holy Spirit and His beloved creation that offer insight towards our understanding of consciousness and the fabric of the cosmos. As a result, some new, though somewhat provocative, ideas have been presented forming a model of the universe that attempts to bridge divisions between its metaphysical and physical aspects. The HIM model attempts to bring back a focus on the character of God the Father, by following the formulations of St Thomas Aquinas in relation to God's natural state of perfect and simple self-understanding. It is from this starting point of Christian wisdom that this model flows from, which results in framing His eternal state of complexity as an infinite order of individualized memories, that can then be associated with God's Word of pure logic existent as immaterial information in the mind of God. Such a characterization of the Father and the Spirit provides the eternal backdrop from which a marriage of theology and science can then be formulated to highlight how God's self-consciousness is the causal and sustaining factor that creation relies on. The author is humbly aware of how drawing such conclusions about God's eternal immutable state and perceptual outlook is risky theological territory to tread. However, elaboration from this description of God's identity, scaffolded by the Thomistic principles, has allowed for the formation of logical implications that hopefully open-up new perspectives on the nature of consciousness itself whilst offering solutions towards marrying the theology of Christianity with findings we are ongoingly uncovering in various fields of science and philosophy.

Sam Breslauer is an independent researcher from Adelaide, Australia who has a specific interest on exploring the intersection between consciousness studies and material science from a Christian world view.