

Chapter 1

A Roman Catholic and Thomistic Approach

This book is framed within the Roman Catholic theological tradition: the *Catechism of the Catholic Church*, official church teachings, writings of the church fathers, and particularly the works of Thomas Aquinas's Christology and Soteriology.¹ There are several fundamental bases for an academic rationale for utilizing the Catholic intellectual tradition in examining the question of extraterrestrial life and theology.

First, the Church's claim as an apostolic faith is one of its four essential features, in its profession as one, holy, catholic, and apostolic, each which are inseparably linked with each other;² and received from the one divine source in Christ through the Holy Spirit and given to the apostles.³ Accordingly the bishops have by divine institution take the place of the apostles as pastors of the Church by apostolic succession;⁴ all members of the Church share in this apostolic mission through the communion of faith and life with its origin.⁵ Further, the Magisterium, the authority of the College of Cardinals and the Pope, with the assistance of the Holy Spirit, claims for itself as guardian and the interpretive and teaching authority of divine revelation; derived from the commission given to the apostles in Luke 10:16.⁶ It is the

1. References on conciliar creeds include: Tanner, *Decrees of the Ecumenical Councils*, 5, 24, 40–60; Davis, *The First Seven Ecumenical Councils*.

2. The Church claims the apostolic nature of the Church is founded on the apostles in three distinct ways: it is built on those witnesses chosen and sent on mission by Christ himself, the handing on of teaching with the assistance of the Holy Spirit, and the Church continues to be taught, sanctified, and guided by the apostles by their successors, the college of bishops. *Catechism of the Catholic Church*, 811; Matt 28:16–20; Acts 1:8; 1 Cor 9:1; 15:7–8; Gal 1:1.

3. *Ad Gentes*, 5.

4. *Lumen Gentium*, 20 § 2.

5. *Apostolicam actuositatem*, 2.

6. The Magisterium exists in service to the Word of God; what it proposes for belief as divine revelation is drawn from the single *depositum fidei*. Therefore, sacred scripture,

role of the Magisterium to interpret in a decisive way both scripture and tradition, utilizing the consensus of documents and teaching of the Church Fathers, councils, encyclicals, and pastoral documents.⁷

Second, the Roman Church has provided the longest continuous theological and scientific historical inquiry in the debate on the plurality of worlds and extraterrestrial intelligence. Its patristic authors and theologians were the first to offer formulations in response to certain theological, philosophical, and scientific arguments for or against plural worlds and extraterrestrials while maintaining the teaching on the uniqueness of humanity within an expanding knowledge of creation. Also, the Church has an extensive legacy of scientific research, led by its Pontifical Academy of Sciences, distinctive as the sole supranational academy of science in the world; and was founded in Rome in 1603 as the world's first exclusively scientific academy.⁸ Its heritage of joint scientific and theological inquiry provides long-standing support for a theology engaged with scientific endeavors. The Vatican operates two important observatories, in Castel Gandolfo in Rome and Mount Graham, Arizona, as part of its research in space studies and whose scientist/theologians, including Vatican astronomers have expressed with certain degrees of confidence, the coherence of a putative existence of extraterrestrial intelligence with Catholic faith.⁹ For this thesis in a work of Catholic theology engaged with science, data provided by astronomy and astrobiology and its consideration of xenologies will be used to inform theology as to the possible xenobiology, morphology, and environments of extraterrestrials, and to extrapolate potential theological anthropologies of divine action with creatures, considered alongside the record of divine action with humans.

Third, Catholic teaching holds two distinct modes of revelation from one common source; sacred tradition and sacred scripture.¹⁰ The Church's

sacred tradition, and the teaching authority of the Magisterium work together under the action of the Holy Spirit contribute effectively to the salvation of souls. *Catechism of the Catholic Church*, 85; *Dei Verbum* 10 § 2, 3.

7. *Catechism of the Catholic Church*, 888–92.

8. First named the *Linceorum Academia*, of which Galileo Galilei was an appointed member in 1610, and reestablished in 1847 by Pius IX as the *Pontificia Accademia dei Nuovi Lincei*, and given its current name in 1936 by Pope Pius XI.

9. Most prominent among these discussed are Thomas O'Meara, Joseph Pohle, Pierre Teilhard de Chardin, Theodore Zubek, Karl Rahner, Yves Congar, John Haught, Guy Consolmagno, José Gabriel Funes, Chris Corbally, Marie George, and Ilia Delio.

10. The Council of Trent affirmed that the *depositum fidei* passed on orally and in writing by the apostles, preserved in the scriptures and unwritten traditions, and continued in apostolic tradition is both a product of the early Church and each a component is a foundational means of revelation. *Dei Verbum* 9, 10 § 1; cf. 1 Tim 6:20; 2 Tim

adoption of the modern methods of biblical criticism by The Pontifical Biblical Commission, founded in 1901, ensured the proper defense and interpretation of scripture according to scientific methods promulgated by Pope Leo XIII's directive in his encyclical *Providentissimus Deus* in 1893, and later reaffirmed in Pope Pius XII's *Divino afflante Spiritu* in 1943. Vatican II's *Dei Verbum*, on the *Dogmatic Constitution on Divine Revelation* in 1965, reaffirmed this approach and encouraged biblical criticism while asserting divine authorship, with interpretive emphasis on the content and unity of the whole of scripture. Accordingly, its interpretive framework is not bound by a literalist approach, rendering it more capable of evolving to integrate new information from other disciplines while remaining in continuity with long-standing teaching and tradition. In contrast, fundamentalist faiths in certain mainline churches have typically considered the notion of extraterrestrial intelligence contentious given its scriptural absence, in approaches based on *sola scriptura*. However considerable attention has been given by certain modern Protestant theologians.¹¹ This approach supports the efforts of exotheology in its engagement with the interdisciplinary field of astrobiology in rendering a more comprehensive and coherent theological soteriology engaged with modern science which demonstrates an ever-expansive universe. Therefore, as the extensive Catholic theological record on the subject of extraterrestrial intelligence demonstrates a lack of doctrinal, scriptural or traditional prohibitions against the possibility of intelligent life outside Earth, a theological re-framing and expansion to accommodate outside intelligences will be argued in this thesis as a natural (and necessary) growth in the evolution of theological understanding of human life and its civilization within a vast and diverse universe. This groundwork allows for new development in scriptural interpretation given the recent scientific data; provided in this thesis is a biblical hermeneutic of the *varied* view in an effort to advance further a modern cosmology in conversation with theology.

Fourth, the Roman Catholic Church embraces a tradition of the development of doctrine, important for theological research in engagement with science.¹² Catholic theologian Vincent de Lérins's *Commonitorium* (c. 434) was the earliest effort to formulate two fundamental rules to guide the

1:12–14 (Vulg).

11. Prominent among these are David Wilkinson and Ted Peters. Others include Wolfhart Pannenberg, Jürgen Moltmann, Paul Tillich, Alfred Whitehead, Lewis Ford, and John Jefferson Davis.

12. Important works on the development of doctrine within the Catholic tradition are Congar, *Tradition and Traditions*; Noonan, *A Church that Can and Cannot Change*; Theil, *Senses of Tradition*; Tilley, *Inventing Catholic Tradition*.

assessment of the proper growth of doctrinal development within orthodox teaching. His first rule argued that new data which bears on doctrine should be evaluated and validated by the standards of antiquity, ubiquity, and universality, and his second that such development in Church teaching must be understood through what precedes it:¹³

[Progress] must be an advance in the proper sense of the word and not an alteration in faith. For progress means that each thing is enlarged within itself, while alteration implies that one thing is transformed into something else. It is necessary; therefore, that understanding, knowledge, and wisdom should grow and advance vigorously . . . in the whole Church and this gradually in the course of ages and centuries. But this progress must be made according to its own type, that is, in accord with the same doctrine, in the same meaning, and in the same judgment.¹⁴

Lerins's thought was later more fully expressed in John Henry Newman's, *Essay on the Development of Christian Doctrine* in 1845. Newman's hermeneutic of doctrinal continuity argued that ideas become more true as they develop in time; Catholic teaching develops in a progression in accord with new data in order to maintain continuity with the old. Newman states, "It changes with them [external circumstances] in order to remain the same."¹⁵ He argued that the evolution of ideas is a natural process; therefore, the development of doctrine in Catholicism is necessary. This idea is encapsulated in his famous quote, "In a higher world it is otherwise, but here below to live is to change, and to be perfect is to have changed often."¹⁶ Newman outlined seven 'notes' or tests of genuine doctrinal development, two of which are pertinent for this discussion. The first is his 'Preservation of Type':

All great ideas are found, as time goes on, to involve much which was not seen at first to belong to them, and have developments, that is, enlargements, applications, uses and fortunes, very various, one security against error and perversion in the process is the maintenance of the original type which the idea presented to the world at its origin.¹⁷

His second on the 'Continuity of Principles' states:

13. See McGuckin, *The Westminster Handbook of Patristic Theology*, 348–49.

14. De Lérins, *Commonitorium*, 23.1–12.

15. Newman, *An Essay on the Development of Christian Doctrine*, 1.1.10.

16. Newman, *An Essay on the Development of Christian Doctrine*, 1.1.7.

17. Newman, *An Essay on the Development of Christian Doctrine*, 6. Introduction.

Doctrines grow and are enlarged, principles permanent; doctrines are intellectual, and principles are more immediately ethical and practical. Systems live in principles and represent doctrines.¹⁸

Accordingly, doctrines evolve but their foundational principles remain unaltered by new information. Illustrations of this development of doctrine in Catholicism in its theological formulations can be determined by examining its theological and philosophical record in how it contended with new, transformative modes of thought. Examples of these historical paradigms are Hellenism, Aristotelianism (preeminent in Aquinas's synthesis with Catholic theology), Copernicanism, Darwinism, the Enlightenment, Modernism, and Ecumenism. Each of these world views, to a greater or lesser extent, portended trouble for orthodox teaching. Each however in time was accommodated in varying degrees by Catholic theology, to the effect that theology was expanded and reoriented; and each new view significantly influenced Christianity in its dialog with these new understandings. Darwinian theory, in particular, is illustrative of this process. The teaching that God created the universe *ex nihilo*, a position founded upon patristic readings of the first verses of Genesis; and the special creation of humans from matter on Earth was held by the Church for centuries.¹⁹ With the development of doctrine as a result of information brought forth by proponents of biological evolution, the Roman Church in time endorsed *theistic evolution*, where contingent natural processes can be understood as part of God's plan in the development of the human body;²⁰ while maintaining that the human soul remains a special, supernaturally created reality. This adjustment is directly relevant to this thesis in considering the evolution of planets, their biospheres, potential habitats and an evolutionary process for extraterrestrial beings possessing immortal souls and who inherit a creator-creature relationship. In this modification in doctrine God remains principally the creator of the body and soul in accordance with established teaching; although the process by which the body is produced is developmental rather than instantaneous. This thought on the development of doctrine is further implemented in chapter 5 in examining the historical evolution of Christian

18. Newman, *An Essay on the Development of Christian Doctrine*, 5.2.1.

19. *Dei Filius*, can.2–4; Denzinger, *Enchiridion*, 3022–24; Lateran Council IV (1215): Denzinger, *Enchiridion*, 800; cf. Denzinger, *Enchiridion*, 3025.

20. See Rahner, "Christology Within an Evolutionary View of the World," 184. The scientific method in certain terms is a product of Judeo-Christian revelation; belief in a Logos as the source of rationality and order and by which creation manifested, the universality and stability of natural laws, and the principle of creation which affirms the reality of physical time and space as derived from a first cause.

theology's contending with possible extraterrestrial intelligence in the *exclusive*, *inclusive*, and *multiple* soteriological formulations, culminating with the development of the *varied* view.

For Newman the appropriation of new data within the tradition, if done correctly, allows for expansion and congruity with existing knowledge, or dialectic between continuity and change in Catholic doctrine. As doctrine develops through gaining new insights into what had been revealed through new information, faith continues to gradually understand its full significance over the course of history.²¹ Roman Catholicism, therefore, given the above discussion is uniquely positioned to explore the theological possibility of extraterrestrial intelligences in accord with its own Christological and soteriological teachings as argued herein. The new astronomy has brought profound attention to the universal claims of a terrestrial religion within an increasingly vast cosmos, presenting a new, major shift in world view which bears directly on these claims. This thesis will argue that the *varied* hypothesis continues this legacy of the development of doctrine, by offering an evolution in Christological doctrine while maintaining the foundational principles of Christianity as a bona fide supernatural religion within a context of potential outside intelligences.

Therefore, exotheological inquiry as expressed according to this thesis represents the latest development of doctrine in the accommodation of theology to a new contextual paradigm in the discoveries of the space sciences; particularly those encompassed by astrobiology, following earlier historical theological engagements. This evolution in this thesis is illustrated by arguments on extraterrestrial xenology, theological anthropology, and new soteriological formulations with regard to extraterrestrials examined in chapters 4 and 5. Specifically, information discovered since the beginning of the space age, and more recently the discoveries of exoplanets have motivated a handful of theologians to consider the theological implications of the new data to Christianity. The new astronomy tends to support the arguments of natural theology that creation is not geocentric nor anthropocentric as taught for centuries by the Church, but rather God as creator is active and present in all places and the sphere of humanity may be a single example of many possible places of divine activity; allowing for the possibility of environments for other created intelligences. Further, the Catholic teaching of an active, omnipotent, and omnipresent Trinitarian God I argue provides for a universe where creation of intelligence and salvation are integral parts of divine action on a cosmic scale.²²

21. *Catechism of the Catholic Church*, 66.

22. The world created is the best possible for the creator's purpose of perfecting

Central for this thesis in considering intelligent extraterrestrial life, and which figures prominently in the hypothesis of the *varied* view is an acknowledgement of the ‘omni-properties’ of God, supported by Catholic teaching,²³ principal among them the absolute freedom of the creator to create. As in the case of human beings, I argue for a diversity of intelligent beings, all originating from the same creator and each ordered to his glory.²⁴ These ‘omni-properties’ described in the foregoing offers such a cosmic theological perspective, argued in the *varied* view. In such a putative biologically diverse universe, God works through the natural order in the creation of matter and in the emergence and support of all living organisms, in their reproduction and differentiation; in which all creatures possess their own particular goodness and perfection; and in the very nature of creation material beings are endowed with their own stability, truth, excellence, order, and laws.²⁵

The model of the relationship of science and theology used according to this thesis recognizes the need for a profound and convincing synthesis between faith and reason in accordance with Catholic teaching.²⁶ Chapter 2 illustrates the importance and relevance of the new scientific data for theology. Chapter 3 provides the historical narrative of a Christian theology in dialog with early, philosophical and theological questions and later, with scientific information which impacted long-held doctrines, most directly those of Christology and soteriology. Exotheology combines divine revelation, reason, and the historical precedents in philosophy, theology, and the sciences. By extrapolation, this thesis proposes the formulation of certain Christological and soteriological possibilities with regard to extraterrestrial life, intelligent or otherwise while maintaining the supernatural legitimacy of

human beings in a world “*in stauae viae*”; it is relatively but not absolutely perfect nor eternal. *Catechism of the Catholic Church*, 310; Aquinas, *Summa Theologica*, I, Q. 25, Art. 6; *Summa Contra Gentiles* 3, 71.

23. The Fourth Lateran Council defined that God is the sole principle of all things visible and invisible, the creator of all, as personal a priori First Cause possessing infinite power and creative productivity, indivisible, spiritual, personal, eternal, necessary, immutable, omnipresent, and absolute. Denzinger, *Enchiridion*, 428 (355). Nothing exists which does not owe its existence to the Creator, and all creation is rooted in a single primordial event, the very genesis by which the world was constituted and time began. St. Augustine, *De Genesi adv. Man.* 1, 2, 4: PL 34, 175.

24. *Catechism of the Catholic Church*, 340–41.

25. *Gaudium et Spes* 36 § 1.

26. “Not only can faith and reason never be at odds with one another but the mutually support each other, for on the one hand right reason established the foundation of the faith and, illuminated by its light, develops the science of divine things; on the other hand, faith delivers reason from errors and protects it and furnishes it with knowledge of many kinds.” Vatican Council I, *On Faith and Reason*, third session.

the Christian religion. As science functions in service to theology by broadening its vision of creation and enabling more accurate formulations, theology provides a critical evaluation of the theories and conclusions of science in relation to Christian revelation and works towards the integration of established scientific knowledge with orthodox teaching.

The physical universe provides the ultimate context of intelligibility within which theology, and accordingly, exotheology operates in conjunction with other disciplines and provides formulations which speak to the greater context of a potentially widely inhabited universe created and maintained by a divine being. Therefore, it relies upon dimensions of other theological disciplines, including contributions from scholars of other faith traditions. For exotheology, the disciplines of astronomy, cosmology, exobiology, and the fields encompassed by astrobiology are particularly vital in keeping theology on the forefront of new data that impacts Christian faith. Christian theology and science have fundamental roles in the unity of knowledge, and for centuries have focused on the uniqueness and centrality of human beings within creation; modern scientific discovery has revealed a vast universe which continues to provide opportunities for discovery for science and Christianity in the broadening of human knowledge. Therefore, science and theology remain colleagues as science discovers new realizations of divine creativity in the universe, where theology will be engaged and even challenged to provide new understandings of God's activity and beneficence.

Section A: A Thomistic Exotheology

Aquinas's teachings are foundationally important for Catholic theology, and especially relevant for this thesis are his fundamental emphasis on a non-conflict between faith and reason,²⁷ his support for natural theology, his incarnational theology, and his emphasis on the absolute freedom of the creator in creating and redeeming intelligent beings. Aquinas's principle that truth is to be accepted regardless of its source supports the use of the scientific data as it becomes available in the service of theology.²⁸

27. Aquinas, *Summa Contra Gentiles*, Book 1, chaps. 1–7; *Catechism of the Catholic Church*, 159; “Though faith is above reason, there can never be any real discrepancy between faith and reason. Since the same God who reveals mysteries and infuses faith has bestowed the light of reason on the human mind, God cannot deny himself, nor can truth ever contradict truth” (*De Filius* 4:3017).

28. “Consequently, methodical research in all branches of knowledge, provided it is carried out in a truly scientific manner and does not override natural laws, can never conflict with the faith, because the things of this world and the things of faith derive