

# Introduction: Thinking of The Universe and Theological Commitment

*If a human person craves immortality, he must, in his individual and collective life realize the mode of the truly existent, the logic of relations found in cosmic harmony.*

*–Yannaras, *The Meaning of Reality*, p. 133*

## **The Universe and the Mystery of Human Existence**

This book is not about cosmology as physical research and it is not concerned with the popular interpretations of fashionable cosmological theories. Nor is it about *meta*-cosmology, that is, a metaphysical extension of cosmology, which lags behind cosmological theories and ideas in order to use them as a testing ground for known philosophical ideas. This book is on the sense of modern cosmological ideas as they originate in the being of humanity and the way that ideas about the universe are related to the philosophical and theological mystery of the human condition in the universe. Thus this book positions itself in the field of religion and science or, more precisely, Christian theology and cosmology.

It does not, however, aim to compare contemporary cosmological theories and observations with the ideas of the world in different philosophical or theological systems. We believe that it would be incongruous to bring into correlation the cosmological views of the Fathers of the Early Christian Church (which historically had been rooted in ancient Greek philosophy and astronomy) with the experimental and theoretical results of modern cosmology. Similar to this, it seems doubtful to conduct a comparative hermeneutics of the scriptural texts with modern writings on cosmology in an attempt to reveal some linguistic parallels: such a comparison would exhibit an arbitrary approach that is dictated neither by the needs of theology nor the logic of science.

Instead, the argument starts from the premise that there is a fundamental asymmetry between cosmology, as a definite form of activity and thinking, and that philosophico-theological consciousness which exercises its reflection upon cosmology. This asymmetry consists in a simple fact that although philosophical and theological motives enter implicitly any speculations on the universe, cosmology as a scientific discipline cannot explicate these motives. The motives we imply here enter our discussion as a certain attitude of consciousness that is determined by an ambivalent position of humanity in the universe, that is, on the one hand, being included in or contained by the universe, and, on the other hand, containing the universe as a representation and articulated reality within consciousness.

The implicitly present philosophy is not a “neutral” form of thought, but is imbued with existential meaning that has theological connotations, in the sense that any philosophical reflection as well as scientific theories are “inserted” (bracketed) in the experience of existence, that is, the experience of communion with God. In other words, the aim of this book is to conduct the philosophical analysis

of those logical operations of the human mind in research of the universe from within a hidden philosophico-theological “obviousness” that is essential to all acts of consciousness, including scientific ones. From this obviousness cosmology is explicated by us as a certain way of interrogating the reality of the world as well as that of human beings themselves.

Such a philosophically and theologically “enlightened” treatment of cosmology, despite its sheer deviation from mainstream science, is in our opinion very timely because it elucidates not only an existential sense of what cosmologists are speaking of the universe, but also the sense of what they are speaking of themselves, that is, of human beings incarnate in this universe and capable of speculating about it. Thus the main interest of this book is not so much in the sense of physical realities that cosmology attempts to constitute, but in the ways this constitution originates in those anthropological and psychological aspects of humanity’s existence that express basic anxieties of existence and represent a theological mystery. Our interest is not in describing that which is in the universe as if this description would be self-evident and not needing any further analysis, but in investigating how this very description became possible. This is a philosophical objective, but one that cannot be fulfilled without recourse to theology.

Correspondingly, the search for the ultimate foundations of cosmological knowledge cannot avoid a certain “theological commitment” related to the stance on the nature and essence of the knowing subject.<sup>1</sup> At the same time, the enquiry into those original

1. Jean Ladrière expressed a thought that in order to explicate the analogy between the deep structure of nature and the structure of human existence as openness, creativity, possibility, etc., one needs to enter what he called the “domain of the word,” which, in our parlance, would correspond to thought within the “theological commitment”: “The problematic of nature can thus be linked with the problematic of human existence. Still, there is no continuity between these two domains. There are perhaps indications pointing in a certain direction, but it is not within the power of cosmological thought, even when developed, to become a consideration

conditions in the study of the universe without which this study would not be possible explicates this hidden theological commitment.

The analysis of the conditions of knowledge is called in philosophy “transcendental.” This analysis deals with two fundamental issues: 1) the intrinsic interlink between human consciousness and the possibility of sensing, judging, and reasoning about the universe; in short: the universe can be presented in thought and knowledge only as constituted within certain transcendental delimiters related to the structures of embodied subjectivity; 2) it is because of the physical and epistemological incommensurability between the universe and human beings, that the universe always remains a *transcendent* background of any *transcendental* knowledge. The “relationship” between the universe and human beings is established on the principles of freedom, that is, free-thinking (related to what Kant called the faculty of reflective judgment, and theologians call the free will of humanity made in the Divine image). This freedom implies that the universe and humanity interact in ways that reflect their mutual constitution: the universe is a never-accomplished mental creation, whereas human subjectivity is the self-correcting structural unity of apperception, the unity of which originates in the thought (intuition and imagination) of the infinity of the universe.

The theological upshot in this transcendental analysis is that humanity remains free and responsible in its thinking of the universe, because this thinking implies free action, free judgment, and choice of theoretical options, which is not subordinated either to the rigidity of the structures of subjectivity, or to the material content of the universe. A theological stance is the possibility of transcendence in cognitive actions, the transcendence either as longing for the

of finality, to enter the domain of the word. Only by meditation on what properly belongs to the word can one open another way of understanding (if one exists), leading towards . . . faith.” J. Ladrière, *Language and Belief* (Dublin: Gill & Macmillan, 1972), 186.

incommensurable content of the universe, or as a resistance to any forms of thought that position humanity as part of the cosmic determinism, denying its ability to avoid the dissolution and crush by the mounting number of facts about the universe.<sup>2</sup> Finally, a theological stance in the transcendental analysis of cosmology is the commitment to the view that the very facticity (that is the very possibility and actual fact of existence) of the subject of transcendental knowledge, that is, a human person, originates in and through communion with the divine, as the giver of life and provider of its image.

The study of cosmology through the prism of the philosophically and theologically shaped mind is not in tune with the modern way of treating the real in terms of scientifically representable matter. In this sense such a study is untimely, that is, out of tune with the present, in the same way as philosophy, which deals with the phenomena (in our case the universe) that cannot encounter any immediate response from wider humanity, is untimely. Thus philosophical enquiry in cosmology imbued with a theological commitment reveals itself in an autonomous existence such that it makes things more difficult and complicated. However, here lies the advantage of a philosophical interrogation of cosmology as an autonomously functioning consciousness above and beyond that mass-consciousness which functions in the natural attitude. Skeptics and nihilists, whose

2. This is a different way of expressing that which Gabriel Marcel asserted in 1940 in his book *Du Refus à l'Invocation* (Paris: Gallimard, 1940), when he discussed a paradox related to the representation of the universe as an object: "The more I insist on the objectivity of things, thus cutting off the umbilical cord which binds them to my existence, that one which I call my organo-physical presence to myself, the more I affirm the independence of the world from me, its radical indifference to my destiny, my goals; the more the world thus proclaimed as the only real one, is converted into an illusory spectacle, a great documentary film offered for my curiosity, but which is ultimately abolished because of a simple fact that it ignores me. I mean that the universe tends to be annihilated in the measure that it overwhelms me. And this, I believe, is that which is forgotten whenever one attempts to crush man under the weight of astronomical facts" (32).

presence among intellectuals bears a sign of our times, can raise a disarming question as to whether it is worth doing at all: “What for to study the foundations of the universe?,” or, correspondingly, “What for to understand the sense of humanity?”

The response to these questions comes from the definition of philosophy as *love for wisdom* (*philo-sophia*) and *truth* (*aletheia*), which implies *love* in general as a major characteristic of the human condition understood theologically. To enquire into the sense of the universe means not only to know it, but to be in communion with it, to love it. Philosophically and theologically oriented cosmology is not “knowledge” achievable and ready to use. Rather, philosophical cosmology belongs to the realm of those perennial aspects of the human quest for the sense of being that can be addressed only in the rubrics of the so-called *negative certitude*<sup>3</sup> pertaining to the long-lived traditional theology which does not provide us with a definite discursive judgment on the existence of God and what God is; this question drives the human reason only to one possible answer: it is *certain*, but this certainty is *negative*, so that one cannot answer this question in rubrics of reason alone. In similarity with theology when cosmology dares to predicate the “universe as a whole,” or “multiverse” (the plurality of the worlds), the outcome of this predication does not resolve the present scientific uncertainty about their actual existence, rather it brings us back to the same “negative

3. *Positive incertitude* is typical for the sciences dealing with knowledge of objects, which can be described as science that operates with some precarious and incomplete data about these objects, which are amended and corrected in the course of science’s progress. The paradox of science is exactly in that this uncertainty and corrigibility of its results is the condition for science to function at all. Another aspect of science is that it cannot know things in the context of the wholeness of the world. By contrast in philosophy, in what concerns its perennial questions about the world as a whole, there is no visible progress, so that it is able to speculate about the world only in rubrics of what are called by Jean-Luc Marion *negative certitudes*. See details of this concept in J.-L. Marion, *Certitudes négatives* (Paris: Bernard Grasset, 2010).

certitude” in which no answer to the question of “What?,” “Why?” and so forth related to the universe as a whole is possible.

Correspondingly, a philosophical enquiry into cosmology within a theological commitment cannot be judged on the grounds of simplified scientific or commonsense criteria. Philosophical cosmology within a theological commitment characteristically contributes to the understanding and formation of humanity through its interaction with the universe. It represents cosmology as a general strategy of acquisition of the world, a strategy that as such manifests the ongoing incarnation of humanity in the universe, or in rather theological terms, the “humanization” of the cosmos. In this sense, philosophical cosmology within a theological commitment is directly related to philosophical anthropology as well as to the discourse of personhood. Both of them are concerned with the ancient question raised in Greek philosophy, “Why is there existence rather than nothing?” Contemporary physical cosmology attempts to respond to this question; however, its forms of thought remain intrinsically unadjusted to this type of interrogation. Said differently, cosmology is content with what it says in physical terms and what one says about it as it exists.

However, to understand the sense of cosmology one needs to establish a new type of “questioning of cosmology” in which thinking evolves beyond what was stated by cosmology itself. Here one needs an “enlightened” reason, or, as it was expressed by Nietzsche, a “great reason” that, on the one hand, is associated with the embodiment in flesh of the universe and would represent cosmology as a specific way of appropriation of the world. On the other hand this “great reason” is related to the Divine image in humanity, which humanity attempts to restore and fulfill, thus making the process of the humanization of the universe its communion with the Divine. In this sense any philosophical

cosmology confesses a free type of thinking not constrained by the findings of the scientific and thus transcendent of physical cosmology by bringing it to the next circle of understanding the essence of being and humanity. The issue is not to think of the essence of cosmology, which would be equivalent to being restricted to its contemporary forms, regardless as to whether we judge it positively or negatively. It is important to realize that by questioning cosmology philosophically and theologically we overcome its seeming neutrality with respect to us, thus advancing our understanding of the very being of cosmology as being in us. Cosmology acts in producing its theories, but it does not think in a philosophical sense (compare with Heidegger's famous assertion that science does not think). The sense of cosmology can become enlightened only when the gulf between its particular theories and human thinking in general is realized.

To establish the sense of cosmology starting from cosmology itself, this cosmology must evolve in a radically reflective or transcendental mode, that is, in fact, to become philosophy. The sense of its theories can be grasped only within a critique originating in experience. This is the realm of transcendental self-experience that can be established through a method of phenomenological reduction. Such reduction aims to overcome a "natural naïveté," that is, a belief that cosmology deals with the things of the outer world. Its ultimate objective could be seen as questioning the neutrality of cosmological propositions (their invariance) with respect to specific historically contingent events of knowing. To remove the elements in this contingency would imply the return to those irreducible certainties that would represent the universe as pertaining to the essence of one's conscious life. It is from this life, with its mundane experiences, that the universe is constituted. Life is understood here not anymore as an empirical psycho-physiological life that belongs to the universe, but as the transcendental self-apprehension that comes forth and from



within which the universe emerges as its intentional correlate. By inverting this last proposition, one can assert that it is through cosmology that transcendental subjectivity is revealed as overcoming its own incarnate boundaries. Indeed, by stripping off the layers of the physical and biological, one comes to discover that the universe as a whole appears as an intentional correlate of transcendental consciousness. Thus “putting out of play” the contingent aspects of the universe brings cosmology to a discourse of the transcendental subject, as that center of disclosure and manifestation of the universe through which the latter acquires its own “voice.”<sup>4</sup>

However, even this transcendental reduction does not guarantee that we do not fall into a “transcendental naïveté.” Such naïveté amounts to thinking that reality presupposes the transcendental subject as that pre-given context-horizon within which reality unfolds. But this transcendental subject still functions as an embodied creature, that is, in the world of physical things. However, the very physical things exist for this subject only as constituted by the thinking subject. With regard to the universe as a whole the situation is different: its alleged totality cannot be constituted by the subject but, vice versa, the subject itself is being constituted by the universe (not in a trivial physical sense).

In order to clarify this thought one must remind the reader that cosmology, as a historically concrete science, is capable of making its claims on the structure and evolution of the universe within the limits of what can be called “positive incertitude,” that is, that certainty which is local in time and is subject to amendment and falsification. This can be expressed as those scientific conceptual signifiers that never exhaust the content of that which is supposed to be signified.

4. Cf. T. Torrance, *The Grammar of Theology: Consonance between Theology and Science* (Edinburgh: T. & T. Clark, 2001), 2. See also O. Clément, *Le Christ, Terre des vivants. Essais théologiques*, Spiritualité Orientale n. 17 (Bégrolles-en-Mauges: Abbaye de Bellefontaine, 1976), 102-3.

“Positive incertitude” in science can also be described in terms of so-called *apophaticism* (well known in patristic theology), asserting a simple truth that the appearances of things and constitutions by the finite consciousness deal with a particular, incomplete phenomenality that pertains to objects. With regard to things beyond simple perception and nominations that exceed the capacity of constitution and phenomenality, one can conjecture only in terms of aberrations and approximations. The fact that we can see and speculate about some aspects of the universe does not entail that there are no other aspects of existence than those that are present and perceived by us, but whose presence cannot be affirmed in terms of consciousness and knowledge.

A simple *physical* example of such a hidden aspect of the universe is its dark matter and dark energy, which according to theory constitute 96 percent of the overall matter of the universe. However, the phenomenality of these theoretical constructs is poor: physics does not know what particular particles and fields stand behind these constructs. A *philosophical* example of concealment related to the universe as a whole can be taken as its own contingent facticity, the sense of which cannot probably be disclosed to humanity at all. Indeed, the notion of the universe as a whole, which is claimed to be a subject matter of cosmology, allows one only to have some precarious and incomplete definitions related to the fundamental finitude (spatial, temporal, historical, etc.) of the subject of knowledge.

However, this “positive incertitude” of cosmology does not mean that from a philosophical point of view one must disdain cosmology as irrelevant to any perennial questions. It just implies that the cosmological research has to proceed along the lines of the scientific method in clear understanding that the universe as a whole will never be constituted at all. Then the persistence of cosmology exhibits the

courage and heroism of scientists in following their quest for the universe despite the ultimate futility of any hope to have this universe as an object of science. The same takes place in theology when believers explicate their experience of God as an open-ended process in a clear consciousness that the true names of the Divine are beyond this age and any denominations. Correspondingly, in cosmology the persistence of research as a purposive activity of humanity is pointing toward its *telos*, that is, the *telos* of research, which as such is also beyond this age and any denominations. Here is a fundamental paradox of cosmology, as well as any other science, namely, that its incertitude is that condition of its progress consisting in the unceasing correction and amendment of its results and theories. However, in spite of the fact that a human person cannot constitute the universe, so that the universe saturates its intuition and blocks the reason, this person remains an independent center of disclosure and manifestation of the universe, resisting any attempt to be crushed by the grandeur of being. In this sense the “negative certitude” in relation to knowledge of the universe turns out to be a constructive certitude of constituting the human subject.

By interacting with the infinity of the universe human persons form themselves: in the measure that humanity is incapable of constituting the universe as a whole, the human person is constituted by the universe as an “object” of humanity’s constant interest and anxiety of its own position in it. This means that the transcendental subject that appropriates the universe into the sphere of its own subjectivity, and is destined to carry out the phenomenological reduction with the goal of revealing the immanent belonging of the universe to consciousness of the subject, is the forming and changing subject who is formed and changed through this very appropriation. One can summarize by saying that the understanding of the sense of cosmology implies the understanding of the formation of the self-

consciousness of humanity's position in the universe subject to one important condition: the cosmological picture does not diminish the place of the human in the universe as the center of its disclosure and manifestation. The more cosmology proves that human beings are no more than a speck of dust in the universe, the more the human person resists this by defending the sense of its existence. That which has been said partially explains the sense of what we asserted earlier—that the human "I" is constituted by the universe.

But the shift of the center of cosmological enquiry into the life of transcendental subjectivity still retains the same perennial question of the facticity of this very subjectivity. If it is claimed that the characteristic feature of personal existence, that is, human hypostatic being, is its ability to resist scientific tendencies to denigrate humanity by dissolving it in the natural and cosmic, and, hence, to understand the cosmic conditions of human existence as the only *necessary* ones, then the question arises as to what is the ground and foundation of the contingent facticity of hypostatic existents, that is, of persons? Where do the sufficient conditions of human existence come from? Certainly one can take a classical existentialist position that makes this last question devoid of any sense, for one cannot abstract from the already-present event of life. However, this stance is unsatisfactory for a theologically inclined mind who wants to see in the very fact of conscious existence the manifestation of *truth (aletheia)* in an absolute sense, such that the acceptance of conscious existence as an absolute reference point of any further philosophizing implies *belief in the truth of existence*. Thus the knowledge of the universe as unfolded from within human subjectivity is by its essence committed to a simple *existential faith*. For a skeptical scientist or for a modern atheist, it would be problematic to proceed from existential faith to religious faith, that is, to the conviction that truth has foundation in God, for any reference to the Divine would imply

transcendence, principally impossible in science and prohibited by the very essence of the phenomenological reduction.<sup>5</sup> However, and this is our main point, the very reduction as well as the functioning of consciousness will be impossible at all if the reference to the source of its contingent facticity would be eidetically removed. In such a case the removal of God as the foundation of consciousness would lead inevitably to a suggestion that there must be another non-worldly foundation of this consciousness, which would be analogous to the idea of God, that God which was previously bracketed out. Correspondingly, we return to the assertion that any hypothetical reduction of God would imply the cessation of functioning of consciousness itself. This is one of the motivations of contemporary phenomenology—to argue that even if the facticity of consciousness cannot be justified, it can at least be explicated through dealing with the saturated phenomena that, in a way, constitute this consciousness.<sup>6</sup>

To understand cosmology within a theological commitment is thus to understand the existential sense of the universe, or, to be more precise, to “understand” what it means to think *of* or commune *with* the universe. What could it mean—the thinking *of* or communion *with* the universe within the conditions of a scientific and technological age in order to avoid such thinking being enslaved by the sphere in which knowledge operates according to some social, but still historically contingent standards? Correspondingly, how could we dress this thinking in words while avoiding all cultural superstitions that engulf our language? And even in the case where

5. One can point to Husserl, who in his *Ideas I* (§58) subjected God to reduction, bracketing it and depriving it of any transconscious status. See E. Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. First Book: General Introduction to a Pure Phenomenology*, trans. F. Kersten (Dordrecht: Kluwer, 1998).

6. Later in this book we will discuss the idea of the saturated phenomena in application to cosmology. For a systematic approach to such phenomena, see J.-L. Marion, *In Excess: Studies of Saturated Phenomena* (New York: Fordham University Press, 2002).

we believe that we have achieved such a goal, could we expect any recognition of that form of thinking which intentionally extends beyond the view of the universe framed by varieties of scientific projects, conference discussions, and numerous publications? All these questions implicitly presuppose that the scientific way of thinking of the universe does not cover the fullness of our communion with the universe, which is concealed in the very fact of our existence. This concealment follows, for example, from the fact that humanity is able to interact not only with the physical world of corporeal objects, but also with the realm of intelligible forms, to which cosmology can attest only indirectly. To think of the universe is thus to explicate the sense of the universe on existential grounds, where our understanding of the adjective “existential” follows from the sense that was asserted by existentialists in the twentieth century, namely, that human life and existence is the primary and unquestionable metaphysical fact from which the whole reality is unfolded.<sup>7</sup> And this, as we have mentioned above, contributes to the perennial issue of how to think of humanity. Thinking of the universe in existential categories thus implies the extended vision and perception of the universe, which, in the words of a seventh-century Byzantine, Saint Maximus the Confessor, is the *makro-anthropos*, that is, that which was created in order to be humanized.

To think of the universe on the grounds of existential communion entails freedom of such thinking. It does not necessarily imply the overthrowing of scientific authority in the questions of physical cosmology: it implies that cosmological theories and hypotheses can be interpreted not as propositions about outer realities but as

7. Our usage of the adjective “existential” must be carefully distinguished from the same adjective that is sometimes used by cosmologists in the context of the stated smallness and insignificance of humanity in the universe; see, for example, J. Primack and N. E. Abrams, *The View from the Centre of the Universe: Discovering Our Extraordinary Place in the Cosmos* (London: Fourth Estate, 2006), 273–78.

movements of the human heart and spirit that reflect a fundamental anxiety of existence. In this case the universe is perceived as a certain *whole*, whose *partial* phenomenality is explicated by science. This *whole* includes not only the physically fragmented or united cosmos, but it includes the infinity of human life (the infinity of relations of human beings to created existents) in the universe. Correspondingly, all accumulated forms of knowledge, established in history to this very date, are merely pieces and moments, temporary and provisional sketches of the immensely mysterious phenomenon of personal beings. The “nontechnological” thinking of the universe, even if it will not be able to reproduce the “whole of the universe” (which was, however, attempted in works of art and poetry) and hence will remain no more than a symbol rather than reality, can receive its justification in a deep hope, that through this thinking we learn something of ourselves that has never been present in our vision of all. Being an intentional thinking, thinking of the universe as a whole brings the one who thinks beyond any conditional objectification and positivity. In a way, thinking of the universe is transcending the limits of thought, which requires from the enquirer exceptional discipline, courage, and humility in face of the fact that the task will never be fulfilled, and that they are ready to learn of themselves something that could shatter the image of their own “I.”<sup>8</sup>

By thinking of the universe as a whole, we attempt to explicate our intrinsically ambivalent existential situation, being a part of the universe, in the particularities of time and space, and at the same time being at “that” paradoxically central “nowhere” from which the wholeness of the universe is unfolded. Some cosmologists object to this by saying that in terms of time we are living in a very special era in the universe, that it is only now possible to detect the

8. Cf. Primack and Abrams, *op. cit.*, 282; Ladrière, *Language and Belief*, 150.

universe's evolution, its origin in the Big Bang, etc.<sup>9</sup> The universe as described by specific cosmological theories is not contingent from the point of view of these models. However, from the point of view of the very possibility of such a description, that is, from the point of view of the contingent facticity of life of knowing persons, it is still contingent. The pole of "nowhere" remains intact simply because cosmology, which deals with the physical background for existence of embodied human persons (that is, its necessary conditions), is not able to shed light on the nature of the sufficient conditions of existence of intelligent observers and theoreticians of the universe.

It is this pole of "nowhere" in thinking of the universe that deprives this thinking of any essential historical goal, which could be placed at the service of any intellectual or social-political economy, if it is not related to the saving ideals of Christianity. Being engaged in thinking of the universe as a whole, we are immersed not so much in the present of the scientific discourse of the universe but in the present of thinking itself. And this present is dictated not only by the advance of contemporary physical theories of the universe but to a great extent by the advance of thinking *per se*, that is, its free philosophical mode, which is not subjected to the logic of the already known but follows that which Husserl called humanity's "infinite tasks."<sup>10</sup> Here it is appropriate to quote K. Jaspers, slightly rephrasing his text, that our historical consciousness of the universe, in spite of being a temporal phenomenon, is a "free-flying" consciousness without "any ground and original point accessible to knowledge, ultimately rooted in that source which is always and necessarily present in ourselves."<sup>11</sup> This type of thinking, flying away from mundane realities and technological delimiters, will reveal more

9. See, for example, L. M. Krauss, *A Universe from Nothing* (New York: Free Press, 2012), 118-19.

10. E. Husserl, *The Crisis of European Sciences and Transcendental Phenomenology* (Evanston, IL: Northwestern University Press, 1970), 279.

11. K. Jaspers, *Weltgeschichte der Philosophie. Einleitung* (München: R. Piper, 1982), 77.



deeply and clearly the fact of our, as Heidegger termed it, “planetary homelessness” (but still centrality), which pertains to the present intellectual, social, and political unpredictability of the human condition. One must, perhaps, amplify this point by using the term “cosmic homelessness,” implying the lack of understanding of the human place in the whole universe. We are homeless because the universe is infinite, and in spite of some claims of our centrality in the universe, we still do not know our place in it, that is, we do not know scientifically the grounds of our facticity in it. What we know for sure, however, is that it is we who articulate the universe, so that, perhaps, as some claim, we are in the center of the universe, but the question of “where” this very center ultimately is, remains in the field of perennial *certitudes négatives*.

While Jaspers could say that the realization of “cosmic homelessness” (as the denial of historical consciousness) becomes “the metaphysical consciousness of being (*Sein*), which being constantly present, must become evident in true being (*Dasein*), as if eternally present,”<sup>12</sup> according to Heidegger, our “cosmic homelessness,” that is, the inability to answer questions about our own essence, drops a shadow of doubt with regard to the being of the universe itself. (Our “cosmic homelessness” can be qualified as *nonbeing*.)<sup>13</sup> Then it is from this perspective of our own finitude, mortality, non-attunement to, and incommensurability with the universe that one must have

12. Ibid.

13. It is worth recalling that Kierkegaard expressed in a dramatic form his anxiety about the impossibility of describing one’s position in being: “One sticks his finger in the ground in order to judge where one is. I stick my finger in existence—it feels like nothing. Where am I? What is the ‘world’? What does this word mean? Who has duped me into the whole thing, and now leaves me standing there? Who am I? How did I come into the world; why was I not asked, why was I not informed of the rules and regulations. . . . How did I come to be involved in this great enterprise called actuality? Why should I be involved in it? Am I not free to decide? Am I to be forced to be part of it? Where is the manager, I would like to make a complaint!” S. Kierkegaard, *Repetition and Philosophical Crumbs*, trans. M. G. Piety (Oxford: Oxford University Press, 2009), 60.

the courage to think of the universe in order to assert ourselves. However, this assertion of ourselves has a particular spiritual importance only for those who still value the humanity of humans, the naturalness of nature, justice of the police, and other perennial values that crown man in the center of the world, for whom this world is given to fulfill the “infinite” task of finding its destiny in union with the Creator of the universe and the giver of life. Thinking of the universe leads one to thinking of God, and it is in this that thinking follows a hidden theological commitment.

It is not difficult to see that thinking of the universe as if we think of thinking itself at present allows one to establish certain liturgical connotations as articulations of the overall temporal span of the universe, its past, present, and future, in conscious acts that fight oblivion, which pertains to the eternal flux of being. When articulated, the universe is being remembered not only as its realized past. The question of active remembrance of the universe is the question of such an understanding of human life in which past, present, and future are not considered anymore as signs of an all-annihilating *Kronos*, but as able to be integrated through remembrance in the image of humanity living in tension between a thanksgiving for existence and a hope for its eternal sense.<sup>14</sup>

To study the universe, though, does not mean to establish a simple vision of the world on the grounds of mundane curiosity or personal needs. It rather forms a vision of that “selfhood” of the universe (as the *makro-anthropos*) which is truly important for one’s existence and which brings to unconcealment the truth of human existence. When we speak of the “self” of the universe, we do not presume that it has hypostatic features but, allegorically speaking, humanity by looking

14. As was suggested elsewhere, the universe as its past, even if human beings know their meaning only precariously, can be *respected*, as certain ancestors of our being, so that this respect can establish a sense of communion with the universe that overcomes loneliness and despair (Primack and Abrams, *The View from the Centre of the Universe*, 291).

at the “face” of the universe sees this “face” as looking at themselves, and it is this all-penetrating “glance” of the *makro-anthropos* that forms the image of humanity as its ability to see the infinite in the finite. In a certain sense human beings, as they are sustained by this last-mentioned glance, want to respond to it, thus asserting not only their longing for commensurability with the universe, but also their infinitely transcending lordship over the universe, resisting their cosmographic insignificance and fear of being crushed under the weight of astronomical facts. Pascal, for instance, compared humans to reeds, thinking reeds, in the universe, the weakest but thinking element in the chain of being, so that a drop of water can kill a person; the universe does not need to arm itself in order to crush anyone. “But even if the universe should crush him, man still would be more noble than that which kills him, since he knows he is mortal, and knows that the universe is more powerful than he is: but the universe itself knows nothing of it. All our dignity, then, consists in thought. It is through thought alone that we have to lift ourselves up, and not through space or time which we cannot fill.”<sup>15</sup>

The freedom in thinking of the universe, however, has its delimiters; this freedom does not imply an arbitrary rule in thinking, first of all its spiritual arbitrariness. When we brought the reader to the thought that thinking of the universe is accompanied by thinking of God, we were conscious that there always was a danger of a “divinization” of the universe. This does not mean a naïve and outdated pagan perception of the cosmos as a living organism or the place where gods corresponding to different astronomical objects are abiding. It is a much more refined form of spirituality that is implied here, rooted in the sense of immanence of the universe, its infinity as

15. B. Pascal, *Pensées*, 199 (cf. 113), trans. Louis Lafuma (Paris: Éditions du Seuil, 1962), 103 (cf. 67). This ET: Pascal, *Pensées*. Selections, trans. and ed. Martin Jarret-Kerr (London: SCM, 1959), 78 (cf. 39).

an actually existent mystery that does not need any reference to the personal transworldly ground of the world. Cosmology in this case becomes a spiritual exercise since it is based in the life of the spirit; however, the demarcation between such a “spiritual cosmology” and theological commitment arises at that point when human beings make a distinction between the universe as a necessary condition of their existence (that is, an immanent medium of their inhabitation) on the one hand, and God, as an underlying transcendent *sufficient* ground of the very possibility of life and vision of the universe on the other hand.

Speaking theologically, there is here a difference of a *soteriological* order, so that to avoid arbitrariness in thinking of the universe means to follow a theological commitment referred to the salvific sense of the universe. A difference of a soteriological kind was pointed out by V. Lossky when he commented on the place of cosmology in the writings of the Fathers of the Church and, in particular, in the case where cosmology loses the sense of the centrality of humanity in the perspective of salvation, for example: “. . . Copernican cosmology, from a psychological or rather spiritual point of view, corresponds to a state of religious dispersion or off-centredness, a relaxation of the soteriological attitude, such as found in the gnostics or the occult religions.”<sup>16</sup> An example of such a dispersion and relaxation of the soteriological attitude can be found in modern “spirituality without God,” according to which the immanence with the world goes together with no belief at all (for there is nothing to believe in since everything is already here and now) and despair (as there is no hope for anything since everything has already happened), which correspond to the idea that a human being is already there, in that reality which theology names “the age to come.”<sup>17</sup> Thus if the state

16. V. N. Lossky, *The Mystical Theology of the Eastern Church* (London: James Clarke, 1957), 195.

of affairs is such as it is just described, the question of salvation as a personal spiritual endeavor, as an intensive anthropological transformation (*metanoia*) may be abandoned as irrelevant. One has everything, which is given in its existential concreteness, and all this represents an unsolvable mystery with which we have to live and die. In a certain sense the immanent and infinite universe is treated as that realized “kingdom” of being in which everything is given and one does not need to enquire in the facticity of this givenness. It is at this point that the theological commitment, in contradistinction to the spirituality without God, aspires and breaks toward the transcendent, enquiring into the origins of being in the perspective of the human life and the sense of its coming into existence. Theological commitment reveals itself as a concern with the *sufficient* conditions of the human existence, implying that life is not only a gift of existence, but a gift of relationship and communion with the eternal.

Thus the delimiters in free-thinking of the universe proceed in the long run from the freedom of human beings made in the image of God: all thoughts and articulations of the universe always contain in themselves traces of the divine image. Even when cosmology proves the insignificance of humanity in the universe, the divine image remains, exactly because the human mind always resists all attempts to circumscribe its life in rubrics of the natural, finite, and transient. Human beings aspire to understand the underlying sense of beings and things, not according to their “nature” (which is unfolded in the sciences) but according to the final causes of these beings and things in relation to the place and goals of humanity in creation.<sup>18</sup>

17. See A. Comte-Sponville, *L'esprit de l'athéisme. Introduction à une spiritualité sans Dieu* (Paris: Albin Michel, 2006).

18. Humanity, first of all, is not satisfied by that vision of its own place in the universe which positions it in the same way as “marble is in the bag” or a “cat is in the house,” or “a teacher is in the classroom”; “. . . it is at this point that a kind of rebellion takes place: the full reality

This understanding cannot be explicated only through physics and biology. It is based in views on humanity as the crown of creation made in the image of God. And this is the reason why in a godlike fashion humanity wants to recognize all sorts of beings (either simple physical objects or living organisms) not according to their nature, that is, according to their compelling givenness, but as results of humanity's *free will*.<sup>19</sup> The image of eternity is retained in any cosmological theory created through the free-willing even if this theory predicts the finitude of all actual forms of existence and life. Free-thinking of the universe is thinking of freedom of the incarnate human person, brought into being in the Divine image by the will of the Holy Spirit.<sup>20</sup>

One can briefly summarize the objective of this book as the unfolding of theological motives in humanity's perception of existence in the universe, which, on the one hand, outlines human beings as its slaves, constantly "crushed by the ever-increasing mass of the astronomical facts," and which, on the other hand, manifests the sense of human life in the universe by elevating it beyond the world order through a belief, hope, and love in the perspective of eternity.

of the individual is surely not exhausted by statistics, and the identity of the person demands an appreciation of his situation in the world distinct from one's situation in the world." M. Natanson, "Being-in-Reality," *Philosophy and Phenomenological Research* 20, no. 2 (1959): 233.

19. The analogy comes from St. Maximus the Confessor's discussion on whether God knows created things according to their nature. His answer is negative: God knows things according to his will: ". . . when Christians were asked by some outsiders puffed up with their learning, how they can claim God knows existent things . . . and that he knows intellectual being intellectually and sensible things sensibly, they replied that he neither knows sensible things sensibly nor intellectual things intellectually. For it is out of the question that the one who is beyond existent things should know things in the manner proper to beings. But we say that God knows existent things as the products of his own acts of *will* . . ." *Ambigua*, 7, PG vol. 91, 1085B. ET: P. M. Blowers and R. L. Wilken, *On the Cosmic Mystery of Jesus Christ: Selected Writings from St. Maximus the Confessor* (Crestwood, NY: St. Vladimir's Seminary Press, 2003), 61-62. Emphasis added.
20. "Authentic theology consists not in the conjectures of man's reason or the results of critical research but in a statement of the life into which man has been introduced by the action of the Holy Spirit." Archimandrite Soprony (Sakharov), *St. Silouan the Athonite* (Moscow: St. Trinity and Sergius Lavra, 1999), 171 (in Russian).

This dichotomy between the infinitely small, finite physical existence and the feeling of the light of eternal life was felt by the Fathers of the Church and the great mystical philosophers, as their personal vision of the darkness of hell and the light of the Spirit—to both of which human beings are constantly turned and in the presence of which they must not only continue their life, fighting cosmic homelessness and despair, but also fight to find the sense of themselves and all creation. Theological commitment in cosmology is thus a characteristic expression of the visible and invisible universe as it appears to man in the perspective of communion, that is, through the eyes and senses enlightened by the Divine presence. Numerous books on cosmology discuss the role and place of humanity *in* the universe. This book brings the universe inside humanity, making the universe that mirror of its soul which humanity desperately wants to find.

### **“Theological Commitment” as a Different Form of the Dialogue between Theology and Science**

There is an element of socio-historical reality that sheds light on the reasons behind the proposed enquiry into the theological commitment in cosmology. First of all, cosmology always (in particular before its twentieth-century developments) was a part of theism. Cosmological arguments for the finitude or infinitude of the world in space and time were employed as different arguments for the existence or nonexistence of God. Theistic inferences are still alive and very popular among some philosophers and cosmologists who attempt to use cosmology in both apologetic and atheistic conclusions.<sup>21</sup> However, this dimension of the debate is not our

21. The literature on this topic is vast. See a concise and eloquent review of recent discussions in H. Halvorson and H. Kragh, “Theism and Physical Cosmology,” in *The Routledge Companion to Theism*, ed. S. Goetz et al. (London: Routledge, 2012), 241–55.

primary concern, because the alternative of existence or nonexistence of God is not an option for this research, which takes an explicitly theistic stance (that is, theological commitment) on the grounds related to the facticity of human persons who are the subjects of cosmological knowledge. Correspondingly, we do not analyze cosmology from the perspective of an explicitly theistic stance based on some dogmatic propositions of God's existence; rather we proceed cautiously from what we call theological commitment as an existential, experiential mode of communion with God.

Secondly, the topic of research is related to the dialogue between theology and science in general that became a matter of scholarly discussions in the last twenty to thirty years. The question is: Has this dialogue, in the form it has been conducted, succeeded so far, that is, has it achieved any results that have had impact on both science and theology? The author believes that a negative answer is provided by the unceasing scientific and technological advance (in particular in the exact natural sciences), which continues with no recourse to the dialogue between theology and science whatsoever. All discussions on whether science and theology are in conflict, or in "peaceful coexistence" with each other, do not have existential implications: the problem remains, and its ongoing presence points to something that is basic and unavoidable in the very human condition. This net result indicates that the method of conducting this dialogue at present is unsatisfactory in the sense that it does not address the major question as to what is the underlying foundation in the very *distinction, difference, and division* between science and religion as those modes of activity and knowledge that flourish from one and the same human subjectivity. But this type of questioning makes any scientific insight irrelevant simply because science is not capable of dealing with the question of its own facticity, that is, the facticity of that consciousness which is the "pillar and ground" of science.



Theology can respond to this question from within the explicitly belief-based ground, namely faith, in that the knowledge of the world represents natural revelation accessible to humanity because of the God-given faculties. Knowledge is possible only by human persons whose basic qualities are freedom and capacity to retain transcendence with respect to all they assimilate through life and knowledge. In this sense the universe as articulated reality has existence and sense only in a mode of personhood, which is a divine gift. Since science does not account for the very possibility of knowledge, that is, personhood, it is automatically prevented from participation in the dialogue with theology on equal footing. It is logical then to express doubt on the meaning and value of such an existing “dialogue” with science at all. If one insists on this “dialogue,” it becomes obvious that science and theology cannot enter this dialogue as symmetric terms. And if there is no impact of this “dialogue” on the logic and development of science, what remains for theology is to exercise an introspection upon science, to conduct a certain *critique* of science from a position that is, by definition, above and beyond not only scientific thinking, but secular thinking in general related to particular socio-historical and economic realities. Thus symmetry between theology and science, theology and cosmology in particular, is broken from the very inception. It is this asymmetry that constitutes the approach to science-religion discussions that we describe in terms of *theological commitment*. Theological commitment is such a stance on human being that always positions it above and beyond those realities disclosed by science alone. It appeals to those meanings of existence that do not compel the recognition of the science in the manner that natural phenomena do. These meanings originate in an innate quality of human beings to long for immortality, that is, communion with the unconditional personal ground of the whole world, which humanity

names God. And it is through this longing that the universe acquires a certain sense as that constituent of God's creation which makes it possible for human persons to fulfill God's promise for eternal life and communion. Theological commitment is thus existential commitment.<sup>22</sup>

Thirdly, theological commitment is the reaction to modern atheism. Indeed, in its goals and tasks the dialogue between Christianity and science is to oppose atheism. However, if one carefully looks at how this dialogue has been conducted so far, one easily realizes that the existing forms of this dialogue are adapted to that which is imposed by atheism. Such a dialogue turns out to be no more than a reaction to atheism, sometimes attempting to unconvincingly justify the very fact of this reaction. Contemporary atheism manifests itself not only as freedom from historical authorities and tradition (that is, liberation from freedom in a Christian sense) and not only as the unprincipled following of the proclamation "enjoy life, for there is no God," that is, not only as the worst form of the unenlightened slavery of Plato's cave in which signs of the Divine presence are not recognized and the very ability to see them in the world is reduced to nothing. Atheism promotes a cult of immanence, the actually existent infinity of the given,<sup>23</sup> appealing *de facto* to deprivation of the senses and the vision of the transcendent (and hence to the relaxation of a soteriological moment). Since modern science, and technology in particular, encourage individuals to be transcendent-blind, creating the immanent images of the transcendent, the advocates of atheism appeal to science. By so doing atheism adjusts to the demands and moods of modern time. It is much easier not to deny the presence of the Divine in the world, but to

22. On an Orthodox Christian appropriation of existentialism see L. Puhalo, *Freedom to Believe: Personhood and Freedom on Orthodox Christian Ontology* (Dewdney, BC: Synaxis, 2001), 48-59.

23. See a more elaborate formulation of a mysticism of immanence, for example, in Comte-Sponville, *L'esprit de l'athéisme*, 145-212.

claim that all spheres of human activity are self-sufficient and do not need any reference to God. Since from a philosophical point of view the question of God's existence or nonexistence cannot be decided at all (the philosophical mind remains in the "negative certitude" with respect to this question), then why should one try to answer it. Would it not be easier to recognize that science, art, literature, and so on are just given in rubrics of that which is *unconcealed* to humanity? Here atheism reveals itself as secularism, as a kind of trans-ideological *läïcité*, as a servility to nobody's interests, and as a servility to the alleged ideal of humanity understood only empirically, as that humanity which is alive here and now.<sup>24</sup> (It is supposed that this ideal of humanity has in itself a universal criterion of its own definition.) To define this humanity in simple categories that overcome racial, national, and class differences one needs a universal language. It is science which pretends to be such a language; to be more precise, it is that scientific form of thinking which reduces the phenomenon of humanity in all its various manifestations to the physical and biological. It is clear from here that modern atheism as a certain form of "immanent humanism" is no more than a scientific atheism. However, this atheism positions itself as more aggressive<sup>25</sup> and sinister, more advanced philosophically and anti-theologically<sup>26</sup> than was the case in the Soviet Russia. The reason for this is that modern atheism is ultimately motivated by the logic of material

24. As was argued by G. Goutner, the alleged ideal of humanity, understood for example as its unity, simply does not exist. One can think of it only in a modality of hope that has a religious nature. See G. Goutner, "The Unity of Humanity in an Eschatological Perspective," in *Theology of Creation*, ed. A. Bodrov and M. Tolstoluzhenko (Moscow: St. Andrew's Biblical and Theological Institute, 2013), 230–36 (in Russian); as well as his "The Idea of Humanity. Epistemological and Ethical Aspects," in *Methodology of Science and Anthropology* (Moscow: Institute of Philosophy of the Russian Academy of Science, 2012), 170–92 (in Russian).

25. See examples of this in, for example, R. Dawkins, *The God Delusion* (London: Black Swan, 2007), and V. J. Stenger, *God the Failed Hypothesis: How Science Shows That God Does Not Exist* (New York: Prometheus, 2008).

26. See, for example, Comte-Sponville, *L'esprit de l'athéisme*.

production and human resources, that is, by the needs of the developing economies and not an abstract ideology.<sup>27</sup>

The freedom from traditional and philosophical authorities as well as historical values inverts in modern atheism toward slavery to the scientifically articulated and verified. It is paradoxical, and fundamentally different from the Soviet model of atheism, that a slogan that “knowledge is power” is not appreciated in the economically advanced societies, for all-encompassing knowledge, that is, knowing too much, is potentially socially dangerous. This entails in turn that knowledge and science both function in society in a reduced and popular form that does not allow one to judge of its certitude, quality, and completeness. Scientific knowledge becomes a world-outlook, an ideology and a filter of social loyalty and adequacy. As a result, the abuse of science becomes a norm that creates an illusion of its efficiency and truth in all spheres of life. The scientific method is treated as self-sufficient and not being in need of any justification and evaluation. Science proclaims the truth of the world from its own rationality, which functions in the disincarnate collective consciousness. Supported through a system of grants from economically powerful groups, it is allegedly done for the sake of human good. However, by functioning in society science forgets the simple truth that science is a human creation and its initial meaning was to guard the interests of people and not to make them slaves and hostages of the scientific method.

The situation with the dominance of the scientific approach to all aspects of life becomes even more paradoxical when one realizes that human beings do not become happier and freer from the aspects of material existence. They cannot escape social injustice, the hardship

27. This point was emphatically defended by C. Yannaras in his article “The Church in Post-Communist Europe,” in *The Meaning of Reality: Essays on Existence and Communion, Eros and History* (Los Angeles: Sebastian Press & Indiktos, 2011), 123–43.

of mundane life, diseases, and moral losses. This happens because science as an ideology does not spell out what is most important, namely that it *does not know the goals and ways of its future development*. In its grandeur science has to intentionally disregard those aspects of reality that are not described by it or that behave sporadically and unpredictably with respect to scientific prognosis. Economic growth and welfare of developed nations that are used to living in comfortable conditions, the cult of consumption and greed, demand more technological development related to the exploitation of natural resources. Every new discovery in physics is employed for the optimization of the production of goods and energy, so that one can speak about merciless exploitation of physical reality in general. It is very seldom that the question of the legitimacy and justification of such an exploitation, or, as some say, “the rape of nature,”<sup>28</sup> is even thought of. By making nature an object of manipulation, scientific consciousness forgets its humanitarian duties in respect to nature: nature must be “respected” simply because we live in it and because there is the light of that all-embracing reason (Logos) which we, human beings, carry in ourselves as little *logoi*.<sup>29</sup> The objects of nature are inseparable from their creator, and the oblivion of this fact leads to the loss of love of them in the same sense as the loss of love for other people. A careful insight of a philosopher or a theologian will unmistakably identify the root of the problem, namely that the atomization and disassemblment of physical reality in the course of its exploitation has its origin in the ethical individualism of those who know this reality, that is, the loss of love for nature in the scientific

28. This was the title of P. Sherrard’s book *The Rape of Man and Nature: An Enquiry into the Origins and Consequences of Modern Science* (Ipswich, UK: Golgonooza, 1991), where he aggressively criticized modern science for exaggerating the sphere of applicability of its methods and the resulting dehumanization of humanity and desanctification of nature.

29. See an anthology of papers on the ecological approach within Eastern Christianity: J. Chryssavgis and B. Foltz, eds. *Toward an Ecology of Transfiguration: Orthodox Christian Perspectives on Environment, Nature, and Creation*. (New York: Fordham University Press, 2013).

community. Individualism consists in the fact that the exploration and acquisition of physical reality becomes an affair of that human spirit which is divided in its narrow professional and corporative interests, in which the element of catholicity with nature through the divine-given existence is forgotten and love does not rule anymore for the interest of knowledge and longing for the perpetual good.

The ambitions of immanent secular reason, supported by scientific achievements, seem even stranger if one realizes that modern science, in spite of its successes, manifests symptoms of a deep crisis related to the uncertainty of its goals. Scientific activity is purposive to the extent that accompanies any human activity. Any particular research has a concrete objective either to satisfy a practical interest or simply curiosity. However, when we speak of the uncertainty of goals of science in general, we mean something different: the scientific quest is spontaneous and unrelated to the spiritual, infinite tasks of humanity. The practical purposiveness of scientific research thus unfolds only a particular sector of nature, so that there remains a gap between that which has been known through scientific phenomenalization and that which cannot be known by science at all. This fact manifests that nature has a propensity to remain *concealed* and react with respect to human experiments unpredictably. As an example, one can point to nuclear physics, which by acquiring the mysteries of the microworld risks creating a state of matter that can threaten human existence on this planet.<sup>30</sup> There is a danger in nuclear experiments of trespassing the boundary of the unconcealed, related to human existence, when constructed devices and artificial states of matter may behave in a nonhuman way, contradicting the

30. For futurological accounts based on the threats originating in modern science, see J. Leslie, *The End of the World: The Science and Ethics of Human Extinction* (New York: Routledge, 1996), and M. Rees, *Our Final Century, a Scientist's Warning: How Terror, Error, and Environmental Disaster Threaten Humankind's Future in This Century—On Earth and Beyond* (London: Heinemann, 2003).

initial objectives of experiments and turning science against humanity. A simple example from philosophical discussions of the 1950s is the atomic bomb, which brought humanity to a new situation in which the conditions of its existence are not controlled anymore only by the natural processes, but depend on the good will of people making decisions to use or not to use nuclear weapons, thus influencing global natural processes.<sup>31</sup> Another example is the ecological crisis. The melting polar icecap of Greenland, the extinction of some animal species, and the forthcoming migration of peoples living in the Arctic region show that technological applications of science apart from *moral reason* lead to problems of the social and political order. Science through technology is not neutral anymore to economics and politics and, on the contrary, becomes their result and prophet. The process of exploration and knowledge of the surrounding world, and thus its “transformation,” becomes involved in the sphere of interests of the world’s powers and classes so that its ethical significance is determined by its belonging to this or that social-economic demand. That which has been said entails that scientific knowledge and the very idea that society can and must develop only on the basis of scientific progress becomes an ideological dogma, the following and defending of which in turn becomes a matter of social loyalty. However, without understanding its logic and definite goals, scientific progress, being *de facto* unavoidable and irreversible, carries within itself a potential danger because of the unpredictable nature of its applications. Human beings want to live better and longer; however, this natural desire does not supply a clear understanding of the goals of science, whereas

31. N. A. Berdyaev prophetically argued in the 1930s that humanity is entering a new era in which the stability of the world will depend on moral decisions of humanity as to how to use the technology available through scientific advance. See his paper “Man and Machine,” *Issues in Philosophy (Voprosy Filosofii)* 8 (1991): 147–62 (in Russian).

humanity is becoming more and more dependent on its achievements and applications.

The fact that scientific advance leaves huge realms of being unexplored and unknown becomes even more evident in theoretical sciences, in particular in cosmology. On the one hand cosmology provides us with a comprehensive theory of the universe supported by observations. On the other hand it has to admit that those forms of matter in the universe which are physically understood constitute only 4 percent of its material content (the remaining 96 percent associated with the so-called dark mass and dark energy remain as of yet beyond the reach of experiments; their existence is a matter of theoretical conviction). The more that cosmology refines its scenario of the universe's evolution, the more it realizes the abyss of the physically unknown. Speaking philosophically, cosmology makes clearly seen the boundaries of the *unconcealed* that is related to humanity: it is only 4 percent of matter in the universe that can be said to be consubstantial to human physical and biological form. Amazingly, however, in spite of all evidence for the limited nature of our knowledge of the universe, cosmologists sometimes position themselves as "prophets and priests" of the universe, preaching of it as if they know the absolute truth of the world. As we demonstrate in this book, such a conviction with respect to knowledge of the universe originates in a naïve representation of the universe as a whole as an "object" whose phenomenality can be exhausted through the logic of scientific signifiers.

One of the major attributes of modern science that makes it powerful is its radical mathematization of nature. Physics and cosmology, through mathematical models and theories, predicate realities inaccessible in direct experiments. There is a paradoxical shift of representations of reality here: unobservable intelligible entities are treated as more fundamental and responsible for the contingent



display of visible nature. As we argued elsewhere, mathematization of nature is accompanied by the diminution of humanity, in particular the personal dimension of existence.<sup>32</sup> Person disappears from scientific discourse in spite of the fact that all articulated facts are made by persons. Science is being effected in the name of human persons, but this same person turns out to be outside of scientific description. Persons are needed for the anonymous objectives of science to disclose reality, but they do not exist for science as agencies of other nonscientific truths and individual lives. Science as a social process needs scientific workers but not persons as unique and unrepeatable events of disclosure of the universe. The same is true with respect to society, which needs not persons but masses of individuals that are much more easily adapted to the norms of materialistic thinking and behaviorist stereotypes based on the consumeristic results of technological progress. Modern atheism exploits this aspect of modern science by insisting on the effective nonexistence of personhood as a philosophical and theological notion. The oblivion of the person is treated by Christian theology as an encroachment on the absolute priority of the human world and those communal links in human societies that have formed the spirit of Christian civilization and the integrity of its historical paths through communion with God. The oblivion of the person is the encroachment on the significance of its history impressed in the architectural image of European cities, masterpieces of art and literature, in the very way of European thinking and its values. The oblivion of the person constitutes an attack on all traditional forms of societies and life, which by the logic of the economical must cease to exist or become unobservable.

32. See A. Nesteruk, *The Universe as Communion* (London: T. & T. Clark, 2008), 188-205.

To defend the person and to reinstate it to its central status in the dialogue between theology and cosmology becomes a leading motive of theological commitment. To reinstate the person means to understand that the problem of theology and science manifests the basic distinction and division of two attitudes to life in one and the same human person. The dialogue between theology and science becomes the explication of the split between intentionalities that the human spirit attempts to reconcile. This, by using the language of Husserl, forms one of the infinite tasks of the human spirit to understand the meaning of existence. The very fact that this dialogue exists attests that human beings transcend the conditions of their physical-biological existence, the self-realization of a special place in the universe in which the function of the Divine image in man is realized.<sup>33</sup> Thus the fact of the dialogue attests also to the fact that it contains the elements of transcendence and asymmetry between theology and science related to the human condition which is called personhood. It is this asymmetry, articulated in reflection, that we call theological commitment, by confirming once again that this is an existential commitment. Correspondingly, it seems doubtful that the dialogue between Christian theology and cosmology is possible without faith that both theology and cosmology represent modalities of the relationship between humanity and the Divine. Thus the dialogue ultimately contributes to growth of faith in God, to that infinite task which aims to restore the salvific Divine image in man.

### **Theological Commitment as Knowledge in Love**

The defense of person in scientific discourse, particularly in cosmology, implies that the thinking of the universe must have

33. N. Berdyaev, *Slavery and Freedom* (London: Centenary, 1944), 94.

exclusively human features. In other words, the assertion of persons through theological commitment must be ontological and not abstract academic *ad extra*. Theology knows only one way of such an assertion, namely through the events of communion. What makes communion uniquely human is the acquisition and advancement of humanity through love. And it is this love that changes the ways of approaching knowledge, making this knowledge the expression of love to God who created that universe which can be known. This proclamation proceeds from the church because the church, in contradistinction to any scientific ideology and metaphysical convictions, asserts the gospel's message of Christ's "trampling death by death" as the possibility of transforming the process of our physical dying into the event of communion of our person with the person of God. By this, humanity is provided with the opportunity to be transfigured from the state of biological existence to life in freedom from any delimiters to love, including love in knowledge. Christ's coming into the world confirmed that the Logos is indeed truly existent not as some given and inarticulate necessity that governs the universe, but as love, according to whose *logos* the world was created. Christ's coming into the world is the unconcealment of that modality of the Divine which is called *love*. But this love is the search of understanding of that whom it loves. Here one sees the link between love and truth, for love to Christ and to a neighbor in Christ can withstand the trial by the world only if this is love of truth. Then one can propose that the dialogue between Christianity and science has sense only if a theological truth based in love of God and the world, created by him, enters a dialogue with love of truth in science, which assumes love of the world and of humanity which knows it.

As a historical reference one can point toward St. Augustine, who formulated a thesis that love (understood as charity, that is, *agape* [Gr.] or *charitas* [Lat.]) is the condition that what is being known

is true: “The only way to truth is by love.”<sup>34</sup> In other words, truth is rooted in love as its epistemological condition, not because truth cannot be fully disclosed without love, but because it is love itself that is the ultimate and only foundation for the possibility of seeing and grasping truth. One must love truth in order to conceive it. In his *Confessions*, with a reference to Christ (John 8:4), Augustine gives an example of the contrary, that is, that the encounter with truth can lead to hatred, for truth, as a “saturated phenomenon,” discloses and shows ourselves to ourselves. Truth forms us differently depending on whether we love it or not. And it is when there is a lack of spiritual power in us in order to overcome hatred with respect to that which this truth discloses as negative in us, we receive retribution: we do not want to be disclosed by truth; however, it will manifest us despite our will, but it will not manifest itself to us.<sup>35</sup> This is why, only in love, when the truth of all “being wrong” in us is manifested and is accepted with love so that hatred is being overcome, will it be possible for this truth to be manifest to us. Love of truth or wisdom assumes that the desire for experience of transient things has been overcome so that knowledge becomes edifying and not arrogant.<sup>36</sup> Pascal expressed differently a similar thought: “With respect to human things it is said that it is necessary to know them in order to love, . . . the saints, on the contrary, say, of divine things, that they must be loved in order to be known and that truth (*vérité*) is manifested only through love (*charité*).”<sup>37</sup> Love, however, is not that which is simply commensurable with experience of mundane reality. It demands that one overcomes the sense of despair and futility of

34. St. Augustine, *Contra Faustum*, Bk. 32, 18. ET: NPNF, Ser. 1, vol. 4 (Grand Rapids: Eerdmans, 1994), 581.

35. St. Augustine, *Confessions*, Bk. 10, XXIII, 34.

36. St. Augustine, *On the Trinity*, Bk. 12, XI, 16.

37. B. Pascal, “De l’art de persuader,” en *L’esprit géométrique et De l’art de persuader* (Paris: Bordas, 2002), 29.

human existence, which was articulated by Pascal in his *Pensées*, and acquires love of God: “what a great distance between knowledge of God and love of him.”<sup>38</sup>

The presence of love in knowledge of the universe, which is the subject matter of this book, means a very simple thing: even if cosmology persuasively convinces us of our own insignificance and the transience of our position in the universe, up to such an extent that one can start hating life on the grounds of its absurdity and ontological homelessness, the love for the truth of life itself provides us with a powerful capacity to see in humanity the truth of its origin proceeding from the truth of God himself.

Love as a phenomenon that is unique would be inaccessible without Christ: “God is Love” (1 John 4:16; cf. Luke 10:27). Thus those who are living in God are those who love him, that is, those who love each other (1 John 4:20). It is only this love that can guarantee an access to the “great reason,” for it is love given to us in the revelation of the Word, the Logos, which reveals itself as *logos*, that is, as rationality, which makes it possible to approach the phenomena that are closer and more intrinsic to us, those that are experienced by the spirit-bearing human flesh and exceed the capacity of discursive thinking. Christ’s revelation has shown that love has a reason that sees and makes articulate those things that the collective and anonymous reason leaves outside of its scope. Christ has demonstrated the *logos* of love by his passion and through his resurrection; he has disclosed it and accomplished it to “the end” (John 13:1). In Christ, truth reveals itself as the ultimate and initial truth, the truth according to which all other truths are possible and that will consummate all truth at the end of times (John 14:6). In a cosmological context, where one aspires to knowledge of the

38. B. Pascal, *Pensées*, 377 (trans. Lafuma, 161).

universe as a whole, which is physically incommensurable with human beings, one needs archetypically to have the mind of Christ-Logos, by whom and through whom the universe was created and for whom, after the incarnation in flesh, the whole universe was intelligibly given in its fullness as an instant of the Divine love, and who remains the Lord of the worlds: “In his right hand he held seven stars; . . . his face shone like the sun in full strength” (Rev. 1:16).

Christian love assigns to knowledge available through reason the status of true knowledge. For “. . . there is nothing love cannot face; there is no limit to its face, its hope, its endurance” (1 Cor. 13:7). Love loves unconditionally, in particular without a condition of mutuality: love does not need anything in response to its gift. In this sense the very creation of the universe manifests a perfect love as the unconditional primacy of love with respect to being: God created the universe out of his love and he does not expect any acknowledgment of this from creatures, for God is above and beyond any sentiments originating from that which he has created. If one refuses to accept the creation of life and the whole universe as a gift of love by declining the invitation to participation in this love, this very love does not suffer from this, remaining still a perfect love. Correspondingly, studying the universe as the created represents a hidden knowing of the divine love, and not only *that which* has been created. To know the universe as a whole means to know God’s love of all creation, including oneself.

Christian love justifies the very possibility of true knowledge, for to the one who loves, that is, believes in God, everything is possible, including knowledge of truth. The loving human being has the same privilege that God has (Mark 10:27): “Everything is possible to one who believes!” (Mark 9:23). Christian love justifies the very possibility of knowledge, for it is this love that allows human beings to become aware of their centrality in creation as bearers of the

divine image, the image of that one to whom everything is possible. However, as was said by St. Paul, true knowledge is not knowledge achieved through one's own effort (1 Cor. 8:2). To know truly one should be known by God, and for this, one must love God (1 Cor. 8:3). To know oneself truly and to know the universe truly means to have knowledge not by my own thought, but by the thought of the one who discloses himself only to those who love him. Knowledge of the universe as self-knowledge in order to be true requires the acquisition, as its archetype, of the "mind of God" through love for him. But this is not what is given to humanity in its natural propensity. To know through love and to know through God's "mind and eyes" requires one to exercise one's will. Christian love, as contributing to the theological commitment, thus means the ability to approach things and to see in them the divine presence contrary to their compelling empirical evidence, that is, to see that presence which can only be manifested to humanity as a carrier of the free will and love. To know things through love and will means not their passive contemplation, but active participation in them, a sort of communion with them which allows one to get access to an otherwise inconceivable transcendence of other creatures and essences. Here love takes responsibility for that which is affirmed in philosophy and science because it Christologically reinstates the definition of philosophy, and hence the sciences, to their proper sense as "love of wisdom" or "love of truth." Without love, human reason is limited in interpreting the world, by transforming it into objects of possession and hence dealing only with their deficient phenomenality, thus abandoning an ontological question on the facticity of their existence. Christian love confesses a hope that the time will come when the "great reason of love" will respect the objectivized world as the other, which is worthy of love, that is, it will see the world by the eyes of the Logos through whom and by whom

all is. To respect and love the world means to love and accept every personal life as that potential center of disclosure and manifestation of the world through the gift of the divine image. Correspondingly, no scientific theory will have any existential relevance if it does not take into account the uniqueness and absolute value of human life. The rationality of secular consciousness here must be complemented and overpassed by the *logos* of Christian love.

### **Theological Commitment as Conciliar and Ecclesial Knowledge**

Some aspects of modern science, on being critically assessed, reveal the presence of contradictions arising from its pretension to independence (autonomy) and freedom of research. The idea of freedom to explore turns against humanity because it becomes the freedom for futility to be imprisoned in the cycle of materiality, or as one ancient writer put the comparison, humans dealing with the enclosures of the material world act as “animals turning the mill.”<sup>39</sup> The issue is not whether scientific progress brings its fruits for simplifying and varying human life; the question is about the intrinsic *telos*, which seems to be absent from introspection by science. When Heidegger qualified science as not thinking, he partially meant that science does not understand its own goal. It is functioning in the world as an autonomous human activity, but its ultimate sense is obscured. Humanity, exercising its freedom of exploiting and subjugating nature to its utilitarian needs, thus forgetting about the sacramental and thanksgiving attitude to nature, becomes a tragic hostage of this freedom to “explore.” The alleged freedom of exploration of nature as being devoid of theological ground and reflection leads to its own self-negation by reducing humanity to

39. Gregory of Nyssa, *Funeral Oration on Placilla*, PG 46, 888D-889A.



mere hermeneutics of biological survival and depriving it of its dignity and theo-centeredness. The freedom of persons from spiritual authority eliminates personhood as the issue, reducing humanity to no more than a futile consubstantiality of the material and thus disintegrating community into dispersed biological applications endowed with the function of indefinite consumption. Contrary to this, Christianity affirms freedom by placing human beings in the center of all questioning and articulations of the world, by implying that human dignity does not simply follow the impersonal scientific view of humanity as a thing among other things, but refers to that invisible origin by whose will humanity strives to fulfill its destiny.

The theological commitment in the dialogue with science sees the split between faith and reason, or the split of intentionalities in one and the same human subjectivity, as the loss of perception of centrality of human person in the dialogue: therefore the dialogue with science has to naturally follow theology, which “has to do with existential needs of the human person.”<sup>40</sup> While reasserting personhood as the uniting mode of articulation and exploration of the world and God, one must not be naïve in order to understand how different this personal knowledge of the world and God can be in physical or social reality. Personhood, or personal mode of existence, implies not only radical *otherness* with respect to the substance of the world, but also *communion* with this substance, which, in particular,

40. J. Zizioulas, “The Contribution of Western Orthodox Theology,” *THE MESSENGER, Journal of the Episcopal Vicariate of Great Britain and Ireland* 6 (May 2008): 42–43. In accord with this, Fr. D. Staniloae writes: “Man today is not content to be just a consumer of the products and distractions provided by technology; he demands to be a man of ever closer relationship with his fellow men, and consequently a man who, in a manner much more acute now than before, lives out his obligation to find those ways and means which will assure that these relationships do not become painful and inimical, but instead remain friendly and responsible. These ways and means can only be discovered however by experience, by coming into contact with those higher realities that man thirsts for in order to escape the deadly monotony of purely material distractions.” *Theology and the Church* (Crestwood, NY: St. Vladimir’s Seminary Press, 1980), 217.

is realized in human communities as the living chain of interpersonal relationships. Communion here incorporates much more than a simple sharing of living space and exercising love, empathy, and compassion with respect to fellow-neighbors. It implies an element of corporate responsibility for persons as community in a particular environment that is conditioned not only by simple social norms, economic interests of a particular group, or purely by the instinct of survival. Communion of persons assumes a certain reference to the source of their existential otherness in the Divine.<sup>41</sup> It is through this reference that the collective responsibility is linked to the concept of *wisdom*, as distinct from that of knowledge. It is often implied that scientific advance takes place in a stream of wisdom: science makes human life better and longer; it gives knowledge and conquers ignorance. But this scientific wisdom does not address the issue of existence: in its success in answering the question “What is the universe?” it does not answer the question “Why is the universe?” Scientific wisdom operates in the limits of the pre-given, which is already accessible to the discursive mind. In a way, scientific wisdom is tacitly embedded in a wisdom of another kind, that is, the wisdom of being, which is affirmed through the very fact of our existence in the universe; and it is the understanding of this ultimate existential wisdom that became a major preoccupation of Christian theology since its early patristic period.

In early patristic times wisdom meant that knowledge was inconceivable without reference to the source of its facticity in God. Knowledge can rather be connoted with created wisdom which in turn is paralleled with philosophy, or with reason. In this case the wisdom of the church, that is, divine wisdom, contrary to created wisdom, represents a saving knowledge to which all mundane

41. See on the theological dialectics of communion and otherness J. Zizioulas, *Communion and Otherness: Further Studies in Personhood and the Church* (London, T&T Clark, 2006).

activities such as science and philosophy contribute and with which they cooperate. But by cooperating in attainment of truth, the wisdom of the sciences and philosophy never exhausts this truth because they are contingent upon this truth existentially: they contain a glimpse of the divine wisdom through the sheer fact that science and philosophy exist. The sciences and philosophies aspire to this wisdom, but in themselves can never attain it within their own boundaries. Reason was sanctified by the spiritual intellect as that link between man and God that made wisdom accessible to human grasp.<sup>42</sup> It is important to stress, however, that the presence of wisdom in human communities was secured not through particular visionaries and spiritually advanced persons, but on the level of corporate participation in it which originated in the charismatic nature of the church and its Councils, which were gatherings of bishops, not of academics, so that the Councils were liturgical events through which the church affirmed its truth. This wisdom is described in Eastern theology by using such words as “catholicity” (universality or conciliarity). One of the features of catholicity is to establish decisions about what is good and right for men not on the grounds of what is good for this or that individual but what is good for all humanity in its entirety, including past, present, and future generations: thus catholicity in its essence refers to the fullness of humanity understood eschatologically.<sup>43</sup>

42. St. Augustine articulated wisdom as the link-piece between creation and God by making a distinction between uncreated and created wisdom, as it appears to the human spirit (*On the Trinity* XII, 14.22). Augustine insists that in spite of the fact that both the word of wisdom and knowledge are given by the same Spirit (1 Cor. 12:8), they are distinct (*On the Trinity* XII, 15.25). And wisdom in this context as being created is dependent upon something else, which originates beyond creation.

43. The intuition of fullness encompasses all possible generations of human beings who will ever live is the idea of fulfillment of the *pleroma* of humanity, that is, of the fullness of the “body” of humanity in Christ. St. Gregory of Nyssa argues that when the Holy Scripture says “God created man according to His image and likeness,” it does mean “. . . the entire plenitude of humanity was included by God of all, by His power of foreknowledge, as it were in *one body*. . . . The whole race was spoken of as one man. . . . Our whole nature, then, extending

Conciliarity, in its depth, appeals to such a morality whose subject is not a single person, or a particular political group, but all humanity. The gift of finding the ultimate common background for human intelligence in the transcendental sphere was granted to many visionaries and deep thinkers. However, it did not prevent the atomizing tendencies in human communities, remaining thus no more than a philosophical pointer toward some common truth of humanity, but not reaching the truth of its unity in full. What was missing in all such findings is the *charismatic* and *eucharistic* dimension of this truth as present and manifested in the church. This gives another dimension to the notion of conciliarity: it is only through being in church, that is, being in council with all people, and being under the veil of the Holy Spirit, that it is possible to know truly. The reality of the church, its tradition as the continuity of the historical revelation of God in the World, as well as the constant presence of the Holy Spirit in the church's liturgy, forms the setting for the ultimate *transcendental and multihypostatic* "subject" to show its own presence in the conditions of its empirical absence. It is through the wisdom of this "subject" that all outward articulations of the world possess truth, understood in an ecclesial and hence eucharistic sense, as truth of life.<sup>44</sup> If humanity is brought into existence in order to realize its ecclesial function by building the picture of the universe together with the universal church, its destiny is to take care of the universe by bringing creation back to union with God. The whole history of the universe, seen previously only through secular eyes and displayed

from the first to the last, is, so to say, one image of Him Who is." Gregory of Nyssa, *On the Making of Man* 17, NPNF, vol. 5, 406 (emphasis added).

44. The assertion of human existence as ecclesial existence received a symbolic interpretation in St. Maximus the Confessor who interpreted the entire universe as the universal Church (*Mystagogy* 2). If one takes into account another parable of Maximus, that is of similarity between man and the universe (*Mystagogy* 7), then one can in the same way infer that there is analogy between man and Church, so that in some sense the Divine image in human beings is essentially the image of the universal Church. Maximus develops this theme in *Mystagogy* 5.

as a natural process, will transform consequently toward its ecclesial mode, that is, through the prism of the history of salvation.<sup>45</sup>

By relating humanity to Christ, whose hypostasis, after Pentecost, was transmitted to the church, theology implicitly affirms that the Christ-event, as central for our comprehension of the possibility of knowledge of the entire universe, has some cosmological significance. Then one can conjecture that the development of the universe has, theologically speaking, a drastically different meaning before the Incarnation of the Logos on earth, and after it. It was necessary for the universe to be in a state of constructive development in order to sustain life on earth and to allow God to condescend to us and to assume human flesh in order to initiate the new stage of salvation history. After the Incarnation and Pentecost, realizing humanity's ecclesial standing, humanity becomes fully responsible for the fate of the universe in the sense that cosmic history becomes a part of the history of salvation.<sup>46</sup> Humanity then must only be understood in the context of the promise of God for its salvation as constituting the locus point of the meeting of God and his creation, as the mediating agency, which is supposed to bring the whole universe through its genuine knowledge to new creation. The wisdom of what we have just discussed is formed by what the church is left with after the resurrection and ascension of Christ, the wisdom we know through church tradition and its ever-experienced liturgical epiclesis.

45. St. Maximus the Confessor gave a metaphorical expression of this transformation in *Mystagogy* 7. In analogy with Maximus, for Gregory of Nyssa the fulfillment of the *pleroma* of humanity will be accompanied by cessation of that time which we experience as temporal flow of physical events and by cessation of procreation, that is effectively by cessation of the biological function of human beings as we understand it today (Gregory of Nyssa, *On the Making of Man*, 22). But this will imply that human nature will experience a change that will lead to a change of the embodiment constitution which determines intentional consciousness at present.

46. The "anthropic principle" that relates the fact of the human embodied existence with the physical parameters of the universe, that is with the possibility of the Incarnation of God, becomes now rather related to the Church as the Body of Christ that comprises not only the living but also the dead and saints.

In the same way that Christians experience an eschatological presence of Christ through liturgy, ecclesial wisdom in the knowledge of the universe through science discloses to men the presence of the hypostasis of Christ. This wisdom reinstates to their eucharistic unity the existing split between the ecclesial and scientific intentionality in studying the universe, that is, unity in communion with God, revealing thus the work of scientists as a *para-eucharistic work*.<sup>47</sup>

Here the wisdom of the Christian church makes itself clearly distinct from philosophical and scientific knowledge as being natural predispositions of human reason since ancient times. The ancient Hellenistic world, as well as all philosophies and sciences which followed its intellectual pattern, did not feel the modes of gratitude and thanksgiving as a beginning of thought. If for the ancient thought there was nobody who had to be thanked, for the modern thought it has always been a fight against the transcendent who might be thanked. The absence of eucharistic intentionality in philosophical and scientific visions of the world results in a desire for unlimited and unconstrained possession of knowledge of things in order to use them for some particular utilitarian goals. Because the possession of things, even in their abstract knowledge, destroys a loving relationship to them, the intentionality of thanksgiving ceases to function as the gratitude for the very fact of existence of those things in creation that are supposed to be loved. To reacquire that eucharistic intentionality in knowledge, one is required to exercise *metanoia* when abstract knowledge and ideas become a manifestation of that *image* which discloses the One who stands in communion with the human spirit and who makes it possible to see behind scientific proofs a certain witness of the One. This *metanoia* represents a mode of ecclesial reality; “thus, it is the church as eucharistic mystery which

47. Cf. J. Zizioulas, *Being as Communion* (Crestwood, NY: St. Vladimir’s Seminary Press, 1997), 120; Nesteruk, *Light from the East*, 2; *The Universe as Communion*, 217.

gives us knowledge of a universe which was created to become a eucharist.”<sup>48</sup> *The universe acquires the sense of sacrament and is thus a correlate of the eucharistic intentionality of humanity.* The Christian church as carrying and sustaining this intentionality reveals itself as that ultimate multihypostatic subject which unfolds the universe in the state of communion and loving relationship.<sup>49</sup>

### **Theological Commitment and Critique of Secular Thought**

One may now discuss the importance of the ecclesial dimension in knowledge from a different direction, namely as to why theological commitment implies a certain critical function with respect to science. Contemporary science is historically rooted in so-called modernity (sometimes historically associated with the fall of Constantinople in 1453), which has been responsible for dualisms such as the opposition between faith and reason, the dualisms that formed the grounds for excluding the divine and transcendent. It is modernity that is responsible for the claim that truth is based on universal reason, which tells us what reality is like. In this historical setting theology (as a way of life) was forced in the dialogue with science following the rules of modernity but not its own intrinsic logic of communion with God. These rules effectively dictated that theology entered the dialogue between faith and reason along the lines of adopted secular standards of scientific truth or normative rationality, assuming a particular notion of the knowing subject (as impersonal and disembodied collective subjectivity) that is sharply opposed to the theological way of asserting truth through events of

48. Ignatius IV (Patriarch of Antioch), “Three Sermons,” *Sourozh: A Journal of Orthodox Life and Thought* 38 (1989): 2.

49. This, as we will see below, is similar to the criterion of coherence of epistemic justification in cosmology, which requires mutual agreement among cosmologists in their community.

incarnate hypostatic lives. Seen theologically, the secular standards of affirming truth are themselves based in certain myths and beliefs (for example in the existence of a universal human reason) so that they can affirm objective values only precariously. One of the dimensions of the modern dialogue between science and theology is exactly to put modernity's claim for the universality of truth under question (at least in what concerns the human sciences, including philosophy and theology), asserting that modernity's ways of appropriating truth were in a certain deviation from the unified vision of the world that was based in the characteristic alliance between faith and knowledge, both originating in communion with God.

Modernity can be characterized as a change in the very way of questioning God. According to the Christian biblical thinking the question never was formulated as "Whether I must believe in God?" and hence "Does God exist?" For a Christian the main question was a biblical one: "Who is that God whom I must trust?" There is a fundamental difference between belief in existence of God and trust in God. The God of the Bible requires from one much more than a recognition on the level of fact or theory of its existence. It demands from us an "existential commitment," an entrusting of our lives in God's care. This does not mean a lack of a rational element in such understanding of faith and trust. In early Christianity one can meet rational arguments in favor of the existence of God. It is enough to mention St. Athanasius of Alexandria, who pointed out that one can deduce the existence of God from observing the order and harmony in the world.<sup>50</sup> One must remember, however, that these arguments were aimed at Christians, that is, at those who believed in God in order to reveal a rational element within Christian faith.<sup>51</sup> Rationality in faith aids one in elucidating the sense of this faith as faith in God,

50. St. Athanasius of Alexandria, *Contra Gentes*, 35:4. ET: NPNF, series 2, vol. 4.

51. Clement of Alexandria, *The Stromata, or Miscellanies*, Book I, Ch. 5. ET: ANF, vol. 2.



but not as belief in happiness and the pleasures of life, for example. Correspondingly, knowledge as such does not lead us immediately to knowledge of the Divine, for the Divine participation in us is not an object of direct “observation” or intuition, but is revealed only through rational reflection.<sup>52</sup>

It is probably only starting from Descartes in the seventeenth century that arguments for the existence of God came to be used in order to convince skeptics that God indeed exists. The intellectuals in Western Europe started to follow a view that religious beliefs are based first of all in rational convictions. This view corresponded to the rise of knowledge rooted in empirical justification and “scientific method.” The arguments for the existence of God, beginning from the times of modernity, based on the logic of scientific demonstration, became the only legitimate foundation for faith in God at all. Divine revelation and personal experience were no longer considered a responsible judgment. The witness of the Scriptures was accepted only after the rationality of such an evidence was established through other independent methods. One can notice here how an increasing wave of secular thinking detached from faith began to impose its standards in the realm of faith. Secularism meant not simply that in arguments related to faith one must use reason, but that this reason is independent of faith and immanent to the logic and laws of this world, being thus the only measure of all human activity, so that faith in God and religious experience acquired any sense only from within this reason.

By criticizing faith for its unconvincing arguments and accusing it of being subjective and related to the overcoming of existential

52. The importance of rational faith, as the faith reflected and elucidated by reason, was accentuated by Thomas Aquinas (*Summa Theologia*, 1a,2,1) in his polemics with St. John of Damascus (*Orthodox Faith*, 1,3), according to whom faith in God is an innate quality. See discussion of this issue in F. Copleston, *A History of Philosophy*, Vol. II, *Medieval Philosophy: Augustine to Scotus* (London: Burns, Oates & Washbourne, 1950), 336–37.

anxieties, “modernity” with its scientific method falls into another extreme: by assigning to reason a disembodied universality, the discourse of humanity is thus being thrown away from the sphere of reason. Science becomes a world-outlook that deals not with concrete human beings (with their immediate concerns, history and life), but as an indefinite and abstract, anonymous and nonempirical structure in being which “controls” every particular embodied creature. Nobody argues against the efficiency and importance of science in the modern world, but it must be remembered that the adoption of the scientific method, in fact, manifests a certain belief in the efficiency and existential importance of the anonymous and disincarnate way of knowledge in opposition to other forms of experience and views of the sense of the human. By decentering the cosmos, that is, removing it from the sphere of the personal standing “in front of” (as an aesthetical category) and making it an extensional arena of blind physical forces (i.e., making it an object), human beings make a preference for a different mythology whose existential meaning is reduced to a simple desire to doom itself in the meaningless and contingent non-purposiveness in the universe, that is, to be dissolved in the “cosmic homelessness.” It is this decentering of the cosmos that is disclosed from within the theological commitment as based in a *philosophical belief* in the very possibility of such a decentering. Since this philosophical belief is not demonstrable from the ways of science itself, its very application remains no more than an empirical and contingent fact that points toward the contingent facticity of that world-picture which is built upon it. Correspondingly, all judgments of the scientific method on the possibility or impossibility of making inferences regarding the transworldly foundation of the universe remain precarious.

Modernity’s stance on knowledge is seen as a certain deviation from the unified and spiritually universal approach to knowing reality

that existed in late antiquity and the Middle Ages. Science, or more precisely knowledge (*episteme*), received its interpretation by theology, which elucidated the sense of knowledge and the foundations of its contingent facticity. Knowledge understood by modernity excluded communion, that is, the living participation and ontological relation with that which is being known. (This relation, by using the language of Heidegger, one could interpret, on the one hand, as letting human essence be controlled by the circle of the *unconcealed*, and, on the other hand, for human beings to be able to remain *concealed* in relation to this circle, retaining its hypostatic, irreducible to nature qualities.) Correspondingly, the truth of such knowledge was limited to individual comprehension and to the correspondence of thought to its object (*veritas est adaequatio rei et intellectus*). *Ratio*, understood as a reduced and transformed version of *logos* of Greek Patristics, corresponded to the transition from the epistemic priority of communion to the priority of the individualized rational concept. The subject of logic and knowledge of modernity acquired a new qualitative feature of being able to wander at large over reality without being aware of its own fundamental otherness with respect to it, that otherness which, nevertheless, allows one to enter relation with reality and interpret it as words imbued with energy (*logoi*). The distortion of the sense of *logos* lied in the foundation of all standards of thought originated in the scholastics (and later were present in Descartes) was a considerable deviation from Christian theology of late antiquity.<sup>53</sup> The change of view on

53. The problem of changing views on the role of subject and the sense of knowledge in history of philosophy (regardless to the Christian context) was carefully traced by Heidegger in his book on Nietzsche (M. Heidegger, *Nietzsche*. Volume IV: *Nihilism* [San Francisco: Harper, 1997]). Contraposing modernity to medieval scholastics (which he links to knowledge “associated with the order of salvation”), Heidegger points out that “man, independently and by his own effort, contrives to become certain and sure of his human being in the midst of beings as a whole” (89). According to Heidegger, the major task is search for the ways of such assurance, a method that inevitably led to the Cartesian formulation “Cogito ergo sum.” However, the proclamation

knowledge as originating not in a hypostasis but in an individual was a certain distortion of anthropology in favor of psychological individualism and also the evaluation of a human subject on the basis of the juridical criteria.<sup>54</sup> As a result, the understanding of objectivity, corresponding to this change, as being devoid of the living communion and based on the realities of a law-like order, led to the formation of the scientific and technical civilization and methods of knowledge rooted in utilitarian principles related to social rights and goals.

Whereas Western theology had to adapt to the demands of modernity and hence accept secular norms in its arguments on the presence of the Divine in the world and its interaction with the sciences, the theology of the Eastern Church retained the “premodern” experience of seeing sciences and knowledge without adapting to the secularism of modernity. It is because of this that Christian theology, in particular in its Eastern Orthodox form, being faithful to the tradition of life in communion with God dogmatically and liturgically, thus transcending all historical divisions, feels empowered to question the foundational premises of modern science and the ways its dialogue with theology is organized.<sup>55</sup> Since modernity is seen by the Eastern Orthodox as a certain deviation

of this thesis does not liberate the theologically committed *ego* from asking a question about the foundation of the very contingent facticity of *cogito*. This, as the Fathers of the Church asserted, was not a question of knowledge as such, but a question about the *logos* of this knowledge, of its very possibility, that is, a spiritual question, inspired by the Holy Spirit.

54. Nowadays such a distortion of anthropology leads to the formation and cultivation of a type of person whose ability to function in conditions of dynamical communion is in a state of decline. This concerns first of all the limited freedom of speech, independent thinking and judgment, in conditions where the abilities of the imagination and even more, volition, are essentially suppressed.

55. This is a particular dimension of a possible response to the question posed by A. Walker more than twenty years ago: “Given that modernism by definition wants to scrutinise and criticise all traditional ways of thinking and expression—and modernism is no respecter of confessions, for all historic and traditional commitments are grist to its critical mill—is there any way we can critically evaluate modernist thought from the perspective of historic Christianity?” *Different Gospels* (London: Hodder & Stoughton, 1988), 4.

from the view that any knowledge contains a deposit of faith (let it be simple existential faith), Christian theology is given the right to use the language and critical methods developed within modern and postmodern philosophy, and other human sciences, in order to explicate those “faith-like commitments” that underlie modern science with its claims for truth and hence the imposed form of its dialogue with theology. If scientific claims for truth will be seen as endowed with the certainty of belief, the dialogue between theology and science will rise to a different level, namely that the distinction and difference between theology and science will be seen as the differentiation of intentionalities and constituents of one and the same human subjectivity. *In this, the dialogue between theology and science will acquire features of a phenomenological project* where phenomenology is employed as a particular method in exercising a critical function of theological commitment. In different words, the discourse seen through the theological commitment cannot avoid phenomenology as a method of explication of this commitment.

The appearance of phenomenology in theological discourse shows once again that theology in the mode of operation by reason is a form of critical thinking, because phenomenology is itself a mode of operation of critical thinking.<sup>56</sup> The sphere of operation of theological critical thinking is in all realms where the church (ecclesial humanity) meets historical and cultural reality. Theology creatively and critically thinks of any emerging historical problem or scientific theme while remaining in the immutable state of the church’s spiritual life, because this life is experience of God, that is, of eternity.<sup>57</sup> Thus theology always functions from above mass-religious consciousness, as well as “secular” scientific consciousness

56. “Phenomenology helps the partial sciences and the natural attitude by clarifying their partiality, by bringing what is absent to them, and showing that what they identify can be seen from perspectives they do not enjoy.” R. Sokolowski, *Introduction to Phenomenology* (Cambridge: Cambridge University Press, 2000), 198–209.

which claims its freedom from any faith commitments; theology's unceasing task is to provide a constant and constructive critique of these modes of consciousness by referring them to the original divine image in humanity.

In doing the above critique theology asserts itself as a *meta-discourse*, that is, as that form of critical thinking about different modalities of social activity, including a scientific one, which expresses the Divine presence and action, and which is not being bounded or exploited by some other particular human activities as their "prophetic" voice, be it the socio-historical sciences or a kind of all-encompassing transcendental philosophy. The critical function of theology with respect to other discourses never allows theology to slip into such a position that its scope and place will be determined by other discourses, for example by the science-religion dialogue as such. In this sense theology can never be defined and positioned by secular reason and thus it does not accept the idea of a complete autonomy of that sphere of the worldly reality which is asserted through rational, scientific understanding.<sup>58</sup>

One must take into account that by promoting theology to be a critical thinking we imply that this theology is in ecclesial setting, that is, its inseparability from experience of God through historical tradition, liturgy, and other forms of communion. This entails that by being critical with respect to various forms of thought, theology

57. In words of D. Staniloae: "The very existence of the Church is an effect, continually renewed of the action of the Holy Spirit in creating communion" (*Theology and the Church*, 218). "The door of the infinite riches of the personal or interpersonal divine being has opened up before the reflections of Orthodox theology, and with it the prospects of an endless progress of the human spirit within the divine" (ibid.). "The paradox of the Church mission in 'this world' is just in that the power of the ecclesial influence of the world directly depends on the ability of the Church to be 'bigger than the word,' to transcend the world and to see it through the 'Divine vision.'" Metropolitan Filaret of Minsk and Slutsk, *The Way of the Life-Asserting Love* (Kiev: Duh I Litera, 2004), 53 (in Russian).

58. As it is emphatically advocated by J.-L. Marion, theology deals with the saturated phenomena, whose phenomenality cannot be embraced by means of scientific analysis.

represents the voice of the church as that “place” in the universe where God meets humanity. This implies in turn that in order to remain critical and encompassing with respect to other discourses, the church must remain *independent* in its voice and not to be easily adapted to the requirements of secular reason, and in particular, to the demands of the dialogue with science.<sup>59</sup> If this were not to be the case and secular reason uncritically claimed its right for neutrality, objectivity, and independence from any faith commitments, faith and reason would remain parallel and nonintersecting in this age.<sup>60</sup> But the separation of faith and reason is the consequence of many other divisions in one and the same subjectivity, and this separation in turn divides, in this subjectivity, the Divine and the created. It is this very division (Gr. *diairesis*), which St. Maximus the Confessor described as the moral tension between the Creator and the created, and whose alleviation is the ultimate goal of the human accomplishment of the Divine likeness.<sup>61</sup> If the tension between faith and reason is to be overcome, it is clear that it can be done only within a strong *faith-commitment*, and secular reason alone is incapable of attempting this mediation in a nontotalitarian and nonreductive way. However,

59. This makes Christian theology flexible to any scientific developments without being assimilated by them. According to V. Lossky, Christian theology . . . is able to accommodate itself very easily to any scientific theory of the universe, provided that this does not attempt to go beyond its own boundaries and begins impertinently to deny things which are outside its own field of vision” (Lossky, *Mystical Theology of the Eastern Church*, 106). This accommodation means to remain critical of all scientific claims for monopoly of truth, that is, to remain “meta-discourse.”
60. This thought was discussed by archbishop John of San Francisco (Shakhovskoi) in the context of the views of the physicist Max Planck on science and religion. M. Planck, in “Religion und Naturwissenschaft,” *Vortrag gehalten im Baltikum (Mai 1937) von Dr. Max Planck*, 2te unveränd (Leipzig: Auflage Joh. Ambrosius Barth, 1938), compared the growth of scientific knowledge and of religious experience with two parallel lines. They have a common point of intersection, infinitely distant from ourselves, that is, distant from the present age and being in the age to come. See Archbishop John of San Francisco (Shakhovskoi), *On the Mystery of Human Life* (Moscow: Lodiya, 2003), 15 (in Russian).
61. See, in this respect, L. Thunberg, *Microcosm and Mediator: The Theological Anthropology of Maximus the Confessor* (Chicago: Open Court, 1995); J.-C. Larchet, *La Divinisation de l'homme selon Saint Maxime le Confesseur* (Paris: Éditions du Cerf, 1996).

if theology submits itself to the logic of the secular (for example, assuming a scientific form) it would become one particular, although very special, mode of activity separated from other modalities of human reality that do not fit the rubrics of secular demands.<sup>62</sup> As an example, following the logic of the secular, theology has to deal with the issue of biological evolution and origin of humanity which, in the perspective of science, accentuates the physical and biological, that is, the corporeal and hence collective. But no theory of evolution can literally say anything about the origin of hypostatic human subjectivity, that is, of persons who articulate this same evolution as such. It is persons who have empathy and love, who can rejoice and suffer, but whose account is impossible in science. Theology, in contradistinction to science, is an existential enterprise never abstracting from the concreteness of the human person and its desire to attain immortality. Theology is experience of communion with the invisible origin of all life, so that it encompasses all reality in which humanity is present, not only physically (through the senses and discursive cognitive faculties) but through insight (Kant would say *judgment*); thus it is intrinsically present in all disclosures and manifestations of reality by human beings, so that all reality's articulations are referred to and *judged* by the theological modality of life.

The theological commitment in the dialogue with science means the radical stance on science following from the objective requirement that ecclesial theology must draw a clear borderline between the dispassionate contemplation of what happens in modern science and its involvement in it.<sup>63</sup> The criteria of delimiters can be

62. Such a "secular" theology, for example, would not be able to take into account liturgical rites, communities, and communion as an indispensable component of experience of the Divine.

63. In a general context this implies the possibility of the critical evaluation of modernist thought from the perspective of historic Christianity. In the words of A. Walker, this means to "demonstrate our commitment to go beyond rational critiques of our culture and modern



set in words of Jesus Christ: “What does anyone gain by winning the whole world at the cost of destroying himself?” (Luke 9:25; cf. Matt. 16:26). In modern terms it would sound like this: “What does humankind gain by exploring and subjecting the world to its curiosity and utilitarian needs at the cost of losing the sense of integrity of existence and the vision of humanity’s infinite tasks and spiritual goals as linked to the transcendent?” Theology must not, it has no right to be involved in, those movements of a new nihilistic spirit originating, in fact, from the modern apology for atheism that dares address to modern men the questions like this: What is the point of the humanity of humans, the naturalness of nature, the justice of the polis, and the truth of knowledge? Why not rather their opposites, the dehumanization of humans to improve humanity, the systematic raping of nature to develop the economy, injustice to keep society more efficient, the vast ocean of distracting and existentially irrelevant information to escape the commitment to truth? Since these counter-possibilities are no longer just a hypothetical speculation but nearly the sole program of the ideologies that have dominated in history since the beginning of the twentieth century, the church and all those for whom the humanity of humans, the naturalness of nature, the justice of the polis, and the truth of knowledge remain absolute values, must have a decisive and radical response to it by conducting the systematic critique of those forms of secular (and scientifically based) thinking which encourage mass-consciousness to the “winning,” autonomous scientific part of the world at the cost of destroying communion with the whole. However, its theological radical critique of the scientifically asserted world does not preclude this same theology from being radically

thought forms . . . and confront modernity (our advanced societies) with the gospel” (Walker, *Different Gospels*, 4). “In the light of the gospel, we have sometimes been called to stand firm against prevailing philosophies and intellectual movements that are not only against the Christian Church but also against humanity” (ibid., 1).

positive with respect to science and the world. What Orthodox theology judges is the alleged autonomy and independence of the scientific view of the world from the very intricate inherence in the human and hence in the Divine.<sup>64</sup> The positive judgment of science and the world originates from the sanctification that existential ecclesial theology undertakes by bringing all fruits of human labor, including science and its picture of the world, to their correct operation in the wholeness of communion.

Here not only a dispassionate critique of a scientific secular mode of thinking is implied.<sup>65</sup> The Christian imperative calls into question the ethical value of pure secular science with its pretense of objectivity and neutrality and its claim for the truth of being, as if it is devoid of any faith assumptions and possibility of transcendence. It calls into question some *gnostic* ambitions of modern science to be the power that helps people solve problems of physical survival. In these pretensions modern science denies not only theology's right to predicate reality, but it denies also philosophy (as love of wisdom) for the uncertainty of its judgments (*certitudes négatives*). The scientific secular mind aspires not to philosophy, but to *gnosis*, that is, precise and demonstrable knowledge. Its aim is to justify the thesis that one

64. Cf. P. Nellas, *Deification in Christ: Orthodox Perspectives on the Nature of the Human Person* (Crestwood, NY: St. Vladimir's Seminary Press, 1997), 93–104.

65. In fact, not only scientific but also Christian thinking. In the words of T. Torrance: “[I]f you detach Christianity from Christ, then it becomes attached to society; then it is immediately engulfed in the whole socio-political world, so that then you’ve got a radical secularisation of Christianity” (Walker, *Different Gospels*, 52). This is the reason that the approach of Christianity to science must take place within the basic doctrinal issues such as Creation, the Incarnation, Resurrection, etc. Any loose adaptation of Christianity to the impostures and demands of modern scientific culture threatens to dissolve Christianity and, as was said above, to make it one particular modality of the activity that excludes all that is human which does not fit in the vision of this particularity. D. Staniloae expresses a similar thought: “. . . we do not think it is necessary to give up our stress upon the spiritual content of dogma when we are faced with the argument that such content can say nothing to the man of today, and therefore we must insist only on the conformity of dogmas with the results of the natural sciences. We believe that dogmas can only be preserved by emphasizing the spiritual meanings they contain” (Staniloae, *Theology and the Church*, 216–17).

must keep silent about that which cannot be spoken in terms of the rubrics of reason. Theological commitment advocates the opposite in a sophisticated, apophatic, sense: one has no right to keep silent about things of which we cannot speak (using pure reason), for in this case we pass over in silence the essence of our existence. Yet one can talk about ultimate existential things only through metaphors and aberrations in being clear that the fullness of essential questions cannot be exhausted by the faculties of reason. When the precision of judgment becomes an absolute value so that all questions beyond this “precise gnosis” are abandoned, the human being feels lost and deprived of its own existential anxieties. In this sense, faith implied in the theological commitment never threatens science and philosophy: on the contrary it protects them from the all-pervasive pretensions of *gnosis* (and, as a result, from atheism and soul-corroding nihilism).<sup>66</sup> Theology based in faith, being all inclusive, needs both philosophy and science because faith operates in the conditions of an incarnate humanity that seeks and asks for truth. Faith has its duty with respect

66. Cf. J. Ratzinger, *Wesen und Auftrag der Theologie* (Freiburg: Johannes Verlag Einsiedeln, 1993), s. 40.

to reason,<sup>67</sup> but it still remains critical with respect to both philosophy and science.

There must be made, however, a comment on the sense of our usage of the word “critique” if it is applied by theology with respect to secular thinking, including science. In fact, there must be made a distinction between our sense of “critique” and atheistic criticism of theology based on the grounds of the so-called “critical rationalism.” Briefly, the essence of this philosophical trend descending from K. Popper, and being first of all represented by H. Albert,<sup>68</sup> consists in appeal to constant understanding and revaluation of the achieved landmarks of knowledge, revising and amending all empirical results as well as intellectual constructs. This methodology of research and seeking for truth is treated as being genuinely rational. Correspondingly, the attitude of the atheistically oriented representatives of this “critical rationalism” is to criticize religion, and Christianity in particular, for being dogmatic and using the “strategy

67. One implies here the duty of faith with respect to philosophy. Christian teaching on the Incarnation, in order to reveal God in its humanity, appeals to a new and superior reason that pertains to human reason. Christians do not have choice in possessing the “kind of reason,” that is *logos*, because they bear name of that one who is the Logos himself. This is the reason why Christians had to acquire the achievements of Greek philosophy and sciences (one may recall Clement of Alexandria who argued in favor of this). St. Augustine asserted that Christianity cannot be compared with ancient religions (*theologia civilis* and *theologia fabulosa*—political theology and mythological theology), with the only exception *theologia naturalis* (natural theology), that is, with an attempt at rational knowledge of God through studying celestial movements. Augustine insists that the term *theologia*, for Christian faith, must be understood only as true knowledge of the Divine. Since the notion of truth is employed, “. . . comparison must be made with philosophy”; thus faith becomes, first of all, the subject of philosophy because as Augustine affirms, “the true philosopher is the lover of God” (Augustine, *City of God*, Bk. 8:1. ET: trans. H. Bettenson [New York: Penguin, 1980], 298). In spite of the fact that philosophy is not identified with knowledge of God, it is obliged to Christian theology in what concerns its rationality. It is because of this obligation that one could develop *theo-logia*, that is, a knowledge of God whose foundation comes from God himself. In this sense faith has its duty with respect to reason because it has duty with respect to itself. See J.-L. Marion, “La foi et la raison,” *Le croire pour le voir. Réflexions diverses sur la rationalité de la révélation et l'irrationalité de quelques croyants* (Paris: Parole et Silence, 2010), 17–29.

68. See H. Albert, *Treatise on Critical Reason* (Princeton: Princeton University Press, 1985), who develops an idea of critical methodology of knowledge following from their criticism with respect to theology.

of immunization” from any criticism with respect to basic dogmas of faith. This concerns first of all the central theological conviction of the existence of God. Since no rational demonstration of such an existence is possible, so that any possible statements about God can be doubted and hence criticized, theology immunizes this aspect of faith from any rational critique and thus it falls into the fallacy of dogmatism, that is, an arbitrary chosen premise for any further deductions. In view of these accusations, our main concern here is the following: If the followers of “critical rationalism” charge religion and theology with dogmatism and irrationalism, how can theology, according to our view, be a universal tool for criticizing secular thinking and science? How is it possible that behind the alleged irrationality of theology there is something that makes it “rational” in the sense of being able to oversee and justify all discourse based on the rationality of reason. In other words, could theology respond to “critical rationalism” through its critique? The answer to this question is already present in the history of thought, and its further explication could form a separate volume on science and religion.<sup>69</sup> However, this is not an objective of this book and we would like to provide a very brief response, related to our claim that theology is destined to exercise a critique of secular thinking.

Any philosophical strategy with respect to science, including that of “critical rationalism,” leaves one basic question unanswered despite a continuing criticism and revision of scientific views of the world. This question is about the very facticity, that is, the very possibility of scientific advance that allegedly goes along the lines of “critical rationality.” As we mentioned above, this advance and the “critical rationality” acting upon it does not understand its sense and its goal.

69. See, for example, H. Küng’s response to Albert’s critical assessment of theology in its pretense for rationality in H. Küng, *Does God Exist? An Answer for Today* (London: SCM, 1978), 324–39, 439–51.

Its *telos*, if it is somehow envisaged, must, from the point of view of critical rationalists be corrigible and amendable, that is, contingent and historically adjustable. But such a critical approach to the ways of human knowledge as part of life leaves humanity in the state of despair, cosmic homelessness, and non-attunement to the universe that has been mentioned before. Theology in this sense provides the human search for truth with teleology in the sense of orientation, recourse to what is solidly existent and to the sense of what human life is about in the perspective of eternity. It breathes a meaning into the disenchanted world so that human beings no longer suffer from being mere spectators staring at the universe's emptiness. A critical function of theology is to override any form of mundane criticism based on scientific rationality and to extract out of this criticism an ultimate positive core of human existence in the perspective of the promise of salvation. To overcome the critique of theology from the side of critical realists, this theology must establish critique of the critique. Thus it must transcend in the name of restoring the home place for humanity. Theology and theologians cannot permit anyone to prevent them from advocating and defending the humanity of humans, the naturalness of nature, the justice of the police. Any cosmological theory with its advance of corrigible findings and mind-boggling discoveries must be subjected to an existential and hence theological critique: the divine image of humanity must be preserved even if this cosmology "crushes man under the weight of the astronomical facts."

**Theological Commitment in a Phenomenological Modality:  
The Centrality of Person**

In its intrinsic critical function upon all social undertakings theology manifests itself in a phenomenological modality, that modality which

studies, analyzes, and qualifies states of human consciousness by referring them to their ultimate source in persons who inhere their image in the Divine. Theology deals with phenomena, in human consciousness, of the presence of God, so that in this sense theology is the domain of phenomenology. However, unlike classical philosophical phenomenology, which fights against transcendence, ecclesial theology assumes the possibility of transcendence in its stance on humanity which, belonging to this world and articulating it, does not allow this world to swallow and reduce humanity to nothing. Here transcendence means the ability of human persons to preserve their otherness with respect to the universe even when this universe is effectively humanized through human articulation. However, this otherness, understood theologically, if it is realized and preserved, and if it is developed and extended through the articulation of the universe, contributes to the growth of religious faith. Thus theological commitment in cosmology, as the movement “beyond secular reason” implies, through bringing personhood to its God-given centrality in being, the deepening and acquiring new experience of God which is manifested in new forms of thought and philosophical language. If cosmology considers itself as self-generating knowledge in which the God-given centrality of humanity is lost or distorted, human thinking of the universe and of its own position in it becomes imbued with the existentially irrational, the sense of homelessness, not being attuned with and incommensurable to the universe, leading to death which strips all sense and value from human life. Seen in this perspective any cosmology, if it loses commitment to existential faith (not to mention its Christian sense), that is, if it does not promote human life on this planet, can become a spiritually damaging practice, where the boundary between the human and inhuman in the universe can be trespassed and the sense of life is lost.<sup>70</sup> All this means that the

explication of theological commitment in cosmology implies the work of spiritually enlightened reason with the aim of explicating persons and their communal affinity to the Divine.

By using phenomenology as a methodological tool in explicating theological commitment, we assume its extension beyond its “classical” sphere associated with Husserl and his followers.<sup>71</sup> From a philosophical point of view the extension of phenomenology toward theology (a so-called “theological turn”) is not unproblematic<sup>72</sup> since it deviates from the initial objectives of phenomenology, which was fighting against transcendence and made a methodological doubt of God through a phenomenological reduction.<sup>73</sup> The question is:

70. S. Horujy argues in a similar vein that since in the Christian vision, it is impossible to speak about creation without speaking about humanity, it follows that “any discourse, all the contents of which are restricted to natural phenomena only, is devoid of religious content and has no connection with theology. This conclusion can be used as a useful criterion or test in discussions of theological problems of modern natural sciences.” If a naïve methodology of such discussions is not related to anthropological reality, it is not related to religious reality either. “In such cases what we see are illusory problems and pseudo-religious discourse in religious disguise.” See Horujy, “How Exactly Is Spirit Present in Creation? The Hesychast Reception of Natural Theology and Its Modern Implications,” in *The Spirit in Creation and New Creation: Science and Theology in Western and Orthodox Realms*, ed. M. Welker (Grand Rapids and Cambridge: Eerdmans, 2012), 105.
71. The scholars of Husserl pointed out that Husserl never talked about religion, God and mysticism explicitly in his published works. Mall lists three books concerned with religious matters: *The Crisis of the European Sciences, Erste Philosophie, Zur Phänomenologie der Intersubjektivität*. Husserl, nevertheless, discusses religious issues in his unpublished manuscript. See details in R. Mall, “The God of Phenomenology in Comparative Contrast to That of Philosophy and Theology,” *Husserl Studies* 8 (1991): 1. Assessing Husserl’s tension between his attitude to the problem of God as being the founder of phenomenology, on the one hand, and being a Christian believer, on the other, Mall states that “the chasm between the God of phenomenology and that of theology remains unbridged till it is bridged either by a fulfilment of intended meaning of the concept of God or the reality of God makes its entrance unto human consciousness via the routes of a mystic experience, revelation, faith or grace. The path phenomenology has legitimately to traverse is only the former one and not the latter. Husserl might have reconciled the two in his own person. But that’s a different story, then . . .” (13). See also E. Housset, *Personne et sujet selon Husserl* (Paris: Presses Universitaires de France, 1997), 265–90, where the reader will be able to find a comprehensive bibliography on Husserl’s involvement in religious issues; as well as A. Bello, *The Divine in Husserl and Other Explorations*, *Analecta Husserliana* XCVIII (Dordrecht: Springer, 2009).
72. See D. Janicaud, *Le tournant théologique de la phénoménologie française* (Combas: Éditions de l’Éclat, 1990).
73. E. Husserl, *Ideas Pertaining to a Pure Phenomenology. First Book*, § 58.



Do phenomena associated with the presence of the Divine retain in them something that does not exhaust them and does not allow their complete acquisition by consciousness?<sup>74</sup> Such phenomena change the classical philosophical stance on the a priori character of the cognitive faculties and the ability to constitute phenomena as phenomena of consciousness. Theology benefits from such a philosophical discussion because theology, having had duties with respect to reason, can be theoretically advanced for the dialogue with science to become more articulated in modern philosophical, linguistic, and semantic formulae.<sup>75</sup> This, in a way, constitutes a patristic ideal; correspondingly, being in the same tradition, contemporary theology should learn from the early theologians how

74. In order to clarify the sense of what is meant by this, it is worth quoting T. Torrance where he refers to the question posed by K. Barth: "How do we come to think, by means of our thinking, that which we cannot think at all by this means? How do we come to say, by means of our language, that which we cannot say at all by this means?" There always remains incongruence between God as the known and man as the knower. However, if the knowledge of God is to take place it must rest upon reality and grace of the object known. In this case the reality of things reveals itself to us and acts in us even in that case when the link between our knowledge and language is irreducible to the intrinsic relations between thought and speech. "We are, therefore, restricted to the sharp alternatives: either to be entirely silent, that is, not even to venture the sceptical question . . . as in regard to the rationality of nature or the laws of thought . . . ; or to ask questions only within the circle of the knowing relationship in order to test the nature and possibility of the rational structures within it." T. Torrance, *Space, Time and Incarnation* (Edinburgh: T. & T. Clark, 1997), 54–55. Rephrasing this in terms of postmodern philosophical theology, how one can speak of the transcendent? Or, in other words, how can one speak of that which is incongruent with language and orders of conceptual thinking? How can one conceptualize that which is intrinsically nonconceptual, preconceptual, or pretheoretical? Will not any speaking about phenomena whose phenomenality does not allow them to be conceptualized be a sort of violence and distortion with respect to these phenomena, reducing their phenomenality to the circle of immanent consciousness and thus depriving them of their otherness, that is, if that which is retained in them is beyond their phenomenization by consciousness? See, for example, Marion, *In Excess*; J. K. Smith, *Speech and Theology: Language and the Logic of Incarnation* (London: Routledge, 2002).
75. Metropolitan Filaret writes in this respect: "Theologians of Christian antiquity were in a constant dialogue with philosophy of their age. While appealing to the Fathers we should learn from them how to conduct such a dialogue. This is necessary for contemporary theologians to enter a similar dialogue with contemporary philosophical thought. Perhaps one should develop a new theological language and this, certainly, does not mean to become unfaithful to Church's dogmatic teaching; on the contrary this new language will facilitate to such an expression of this teaching, which allow for this dialogue to take place" (*The Way of the Life—Asserting Love*, 44–45).

to conduct a dialogue with science and philosophy by employing contemporary philosophical thought. In reference to the practices of the Fathers, this constitutes a neo-patristic dimension of the dialogue of theology with science as another dimension of theological commitment. Correspondingly, the explication of the theological commitment in cosmology becomes a contribution to this synthesis as the extension of old forms of thought and existential meanings toward our age.

The theological commitment in cosmology implies a certain stance on anthropology, or personhood. It sees the split between faith and reason, or the split of intentionalities in one and the same human subjectivity, as the loss of centrality of the human person in the dialogue. Correspondingly, it is because of the advance of technology and science, which diminishes a personal dimension of existence, that there is a growing concern about the respect of human dignity and freedom in our time. Humanity, understood theologically as events of hypostatic existence, manifests the living transcendence (through communion) and thus the possibility of reaching out to the transcendent, as that personal rationality through communion with which the world receives its meaning as the means of the dialogue between humanity and God. The dialogue between Christian theology and science becomes a radical form of intellectual, cultural, and spiritual *mediation* among all splits and disintegrations in human life. It demonstrates that there is a common ground for all humanity in the otherness of God, as well as in consubstantiality with the universe. This position confirms an old patristic view that theology is a mode of life and the essence of the human condition is communion with the divine. Within this perspective the dialogue between theology and science rejects either the dominance of pure faith or pure reason, for it considers both of them within the integrity of hypostatic humanity as two modes of participation in the divine.<sup>76</sup>

At the same time it does not want to consider theology as a dialect enclosed in itself and unrelated to other spheres of human reason, although it never adapts to any unquestioned norms of secular reason.<sup>77</sup>

In a phenomenological perspective the problem of mediation between theology and science can be formulated as the reconciliation of the two types of experience in one and the same human subjectivity. On the one hand, in science, this experience is empirical and theoretical, delivering to human subjectivity knowledge of things “present in their presence.” This is achieved by the fact that all phenomena related to the outside world are constituted within the immanence of the *ego*. Regardless as to whether one means empirical observations and controllable measurements, or mathematical statements, what is evident is that in all these cases the “reality of the outer world” is affirmed through the structures of the constituting subjectivity. On the one hand consciousness poses scientific phenomena outside itself making them objects, as if they exist separately and independently of the subject; on the other hand the form of the content of these phenomena is generated by the human subjectivity so that the form of these phenomena is immanent to

76. This implies, according to Fr. D. Staniloae, that “any progress in understanding dogma depends in part on the progressive understanding that science has of the world.” However, and here he accentuates the theological commitment, “theological thinking cannot be separated from spirituality,” and this is the reason why Orthodox theology “takes scientific progress into account only in so far as science makes a contribution to the progress of the human spirit, and only in so far as it deepens in man the experience of his own spiritual reality and of the supreme spiritual reality . . .” (*Theology and the Church*, 216).

77. Here our position is reminiscent of some ideas from the so-called “Radical Orthodoxy” theological movement. However, one must insist on a cardinal difference between our Eastern Orthodox Christian advocacy of theological commitment within ecclesial setting from a vague reference to the church in “Radical Orthodoxy.” For a survey of “Radical Orthodoxy’s” ideas see, for example, J. K. Smith, *Radical Orthodoxy: Mapping a Postsecular Theology* (Grand Rapids: Baker Academic, 2004). It will also be useful to take into account a volume on the dialogue between Eastern Orthodoxy and “Radical Orthodoxy”: A. Pabst and C. Schneider, eds., *Encounter Between Eastern Orthodoxy and Radical Orthodoxy: Transfiguring the World Through the Word* (Farnham, UK: Ashgate, 2009).

human consciousness. Thus the transcending tendencies in scientific knowledge are present in the very foundation of its natural attitude, whereas phenomenology attempts to clarify the sense of this transcendence by referring it to the subjective pole of knowledge. Scientific phenomena, articulated as certain transcendences of the sphere of subjectivity, can be represented discursively as objects that manifest themselves as being poor in terms of their intuitive content, that content which forms an invisible and silent context of that objective reality which appears through the procedures of science. In other words, by making phenomena objective in a scientific sense, what is left behind is the intuitive content of the life of consciousness, which cannot be phenomenalized at all; thus human subjectivity cannot be reduced to that which is phenomenalized; hence there is something in this subjectivity—its personal, hypostatic center—that passes over any scientific presentation of life.<sup>78</sup> Thus human persons transcend the scientifically organized universe in a very sophisticated sense: even if cosmology asserts human existence as insignificant, it cannot remove the intuitive content of the transworldly dimension, which pertains to human persons as divine-made agencies. Thus when the scientific mind poses physical reality as objective and independent of human insight, it is not as if human history has been “cosmosized,” that is, placed in the cosmic context, being reduced to the necessities of substances and the laws of the universe. It is completely opposite: the universe is being humanized, becoming the content and structure of human subjectivity as part of the unfolding human history. The universe becomes immanent to humanity, whereas humanity retains its transcendence to it. In spite of the fact that this transcendence is always in place and is the motivating force of any scientific enquiry, which never stops because science

78. See on unknowability of human beings for themselves J.-L. Marion, “*Mihi magna quaestio factus sum: The Privileged of Unknowing*,” *The Journal of Religion* 85, No 1 (2005), pp. 1-24.

never abolishes the freedom of humanity to progress beyond the already achieved, it is this very science that cannot give an account for the ground of this transcendence because it does not account for persons. The dissatisfaction of science by its inability to account for the contingent facticity of personhood leads, in a paradoxical way, to its fight against transcendence as the retaining of those foundational intuitive existential contexts that make possible any scientific articulation.

Theology exhibits a clear difference with science: it claims that it is possible to accept the phenomena of the divine as absolute, unconditioned by thought or speech, that is, to retain as “present in absence” that which is beyond the expression of what is given or revealed, that is, beyond that which can be phenomenalized. On the one hand the phenomena of the divine are immanent because they belong to human experience; on the other hand they are transcendent because they cannot be phenomenalized within the rubrics of pure thought and language, that is they cannot be exhausted by means of signifiers of that which they suppose to signify. One can say that theology retains transcendence in immanence. Here classical phenomenology, with its philosophical respect for immanence, enters an irresolvable conflict with theology. According to classical phenomenology the phenomenality of God, as well as the underlying facticity of science, would be forbidden, insofar as they reestablish transcendence as opposed to the reduction that attempts to neutralize it. Science is not subjected to this problem to the same extent because the scientific discourse does not attempt to see the “other” side of physical phenomena, that side which is responsible for their contingent facticity. In science human subjectivity operates in the natural attitude by affirming objects of the universe as existing outside and independently of this subjectivity. However, the facticity of that givenness of objects of physics, that is, their articulated

phenomenality, lies in that same subjectivity which attempts to be abstracted from them. If in theology the problem of the phenomenalization of the divine coincides with the problem of theology's facticity, in science the obvious phenomenalization of the finite things and events does not naturally bring human subjectivity to an enquiry about the facticity of the science that explicates these phenomena. Science can effectively function within the sphere of immanence of that subjectivity which generates it, remaining merely an efficient tool, the very possibility of which remains obscure.<sup>79</sup>

Then a reasonable question arises with respect to the dialogue between theology and science: What is really meant by the dialogue between theology, which implies transcendence in its very definition, and science, whose monism, as immanentism, is implanted in scientific methodology so that transcendence is precluded? The situation is aggravated by the fact that transcendence is not self-evident even in theology if it is taken in a purely philosophical mode. That philosophical theology which considers God in terms of existence and real transcendence, causality and substance, is subject to a phenomenological critique: God is disqualified from being a phenomenon. In contradistinction to this, the theology of experience is based on facts and manifestations linked to the Scriptures and eucharistic communion, and here we deal with such *phenomena* that render a sort of concealment, not being fully disclosed through those aspects of intuition that cascade toward expression. In other words, theology understood as experience deals with phenomena that are pretheoretical. Hence there is a general problem of how to express, theoretically, pretheoretical experience; for example, how to employ thought and speech in order to express that which, by intuition, cannot be thought and spoken of, that is, that which exceeds the

79. Cf. A. Gurwitsch, *Studies in Phenomenology and Psychology* (Evanston, IL: Northwestern University Press, 1966), 399-400.

limits of the constituting ego. In other words, how is it possible to retain the transcendence of God while speaking and thinking of him within the immanence of human subjectivity? Evidently, a similar question must be formulated with respect to the universe: how to retain the transcendence of the universe as a whole while speaking and thinking of its observable and nonobservable parts within the immanent subjectivity.

The Greek patristic response to such questions would be that knowledge of God cannot be exhausted by reason and its linguistic means; theology operates with metaphors and allegories that, however, reflect existential, precategorical, and pretheoretical truth. The challenge to philosophical theology, which appropriates existential truth of God within the limits of reason, is to overcome the phenomenization of the transcendent and thus to preserve transcendence in immanence. In different words, theology has to deal with the intrinsic ambivalence of the givenness of the divine, that is, with its “presence but in absence.” If theology, being scrutinized by philosophical thought, is in need of justification of its own ability to retain transcendence within the sphere of phenomenality of consciousness, cosmology, if it intends to engage with religion, needs a similar sort of justification but to a much wider extent. This implies that the problem of mediation between theology and cosmology requires one to deal with a generic issue of the possibility of transcendence in cosmology. In more specific words: In what sense does intrinsic immanence of scientific assertions about reality retain in itself the elements of transcendence; or how does the theoretical speech of scientific discourse retain the signs of that otherworldly ground of overall facticity, which is fundamentally pretheoretical? One must not be surprised that this question is formulated by persons. In other words, the retaining of transcendence means here the transcendence of persons as not reduced to that which is

phenomenalized by the sciences. Seen in this way the difference between science (cosmology) and theology can be described in terms of the difference in expressing experience of transcendence.

The explication of this last-mentioned difference and the outline of the ways of reintegration of intentionalities employed in science and theology can be made on the level of those borderline situations where the excess of intuition of a phenomenon effectively blocks its discursive exhaustion and renders in it something that has not been intended and conditioned by experience. Here cosmology provides us with at least two issues relevant to our concern: cosmology of the origination of the universe as a single and unrepeatable *event*, and the issue of position of humanity in the universe in the perspective of an unrepeatable and incommunicable *event* of embodiment (incarnation) of every human person. The universe appears to humanity as given in its contingent facticity, but its sense and origin are not comprehended by humanity. Humanity, on the contrary, is comprehended on the basis of the event of communion with the universe in the very measure that this event is not comprehended. Similarly the event of birth as contingent hypostatic incarnation (the event of hypostasis in Levinas's terminology<sup>80</sup>) is not comprehended by the personal subjectivity (this event does not show itself to subjectivity), but this person is comprehended on the basis of this event in the very measure that the person itself does not comprehend the event.<sup>81</sup> It is the inability to comprehend the sense of embodiment

80. See E. Levinas, *Time and the Other* (Pittsburgh: Duquesne University Press, 1987), 42-43.

81. A hypostatic human being appears to itself without controlling the conditions of its contingent appearance but attempting to phenomenalyze it through the flow of life as directed to the future. In different words, subjectivity is extended here toward a nonintentional immanence, or reversed intentionality where the *ego* finds itself subject *to*, but not subject *of*, a givenness. The *I* no longer precedes the phenomena that it constitutes but is instead called into being as the one who receives this intentionality. The sense of the *I* is driven not by preconceived forms of subjectivity but by events whose sense is not immediately accessible to subjectivity but unfolds in time: the more we progress in time in seeing the universe, the more we comprehend the



in its hypostatic facticity that makes the problem of origin of the universe as well as the problem of origin of personal existence one and the same unsolvable metaphysical mystery.<sup>82</sup> Correspondingly, one can speak about incommensurability of the universe as well as the facticity of personal existence to all forms of conceptual thinking. It is the inability to comprehend the pretheoretical and preconceptual in the givenness of the universe to the human person as well as the givenness of the person to itself, that indicates that the universe and person show themselves in rubrics of immanent consciousness while remaining incomprehensible and retaining inexhaustibility in terms of conceptual thinking.

### **From the Image of the Universe in the Garments of Skin to the Image of the Universe in the Divine Image**

In this concluding part of the introduction, we intend to discuss perhaps a most difficult aspect of the theological commitments in science and in cosmology in particular, namely that aspect of the Judeo-Christian faith which is related to the Fall. If, before this point, the theological commitment could be thought of as a kind of philosophical extension of the vision of the world, which complemented some theology-related ideas on creation and the possibility of knowledge of the world, the appeal to that theologically understood Fall dispels an illusion of the neutrality of science with respect to theology. The stance of faith originating in Scripture and tradition as those elements that reveal and manifest the Divine providence with respect to humanity and the world place scientific activity in the context of the history of salvation and transfiguration

sense of its past; the more we grow in our life, the more sense we constitute out of the fact of our coming into being.

82. Cf. G. Marcel, *Being and Having* (London: Collins, 1965), 24.

of the universe. In this perspective cosmic history, contrary to the common opinion that human history is included in the cosmic evolution, becomes a part of the history of humanity.<sup>83</sup> From the point of view of the physical cosmology, such a vision of cosmic history can be seen as subjective and nonscientific. However, if it is seen from within a phenomenological stream of thought, this view of cosmic history as part of human history can be justified by referring to the fact that the constitution and phenomenalization of the universe is being done by human subjects. Here an existentialist motive is present, namely the primacy of the fact of life and consciousness, which is not subjected to any doubt and interrogation in terms of that which allegedly preceded it temporally or logically. Christianity complements such an existentialism in that it relates the primacy of human life and consciousness to their createdness, that is, their origin in God, in the gift of life in his image.

The assertion that cosmic history is included in the history of salvation is a very strong aspect of the theological commitment, for here one assumes that humanity is not only the microcosm, that is, human beings are connatural with the visible universe, but that, *de facto*, humanity at this stage of the history of salvation determines the fate and future of the universe (even through its knowledge). This conviction entails not only geocentrism, related to the planet Earth as that place where history is being created, but also a spiritual anthropocentrism implying the vision of humanity not only in terms of nature subordinated to the necessities of the physical and biological order, but as *persons*, that is, hypostatic existence, from within which one can only talk about the existence of the universe as an articulated

83. As it was asserted by J. Ortega y Gasset in a different context: "Because all other reality is included in human life, that life is the basic reality; and when a reality is the reality, the only one properly to be considered as such, it is obviously transcendent. This is why history . . . is the superior science, the science of fundamental reality—history and not physics." J. Ortega y Gasset, *Man and Crisis* (London: Allen & Unwin, 1959), 122.

reality. When theologians affirm humanity as hypostasis of the universe,<sup>84</sup> they implicitly point toward Christ as the archetype of the human person, Christ as the incarnate Logos, in whose hypostasis the universe as well as man exists. In this sense the geocentrism and anthropocentrism of cosmology inherent in the theological commitment mean Christocentrism, for it is here, on the planet Earth, that the meeting of the Divine and human, uncreated and created took place, and it is because of this that earth is spiritually central as that place from which the disclosure and manifestation of the sense of the created universe takes place. One must also take into account that the Christocentric view of cosmology provides a certain justification of the very possibility of knowledge of the universe as a whole. Indeed, it is only the archetype of Christ (who became incarnate in human flesh in one particular point of space and who did not leave his place at the right hand of the Father, and thus was hypostatically present everywhere in the universe created by him) that gives us a historical example of such a vision of the universe in which its separated and distanced objects at the same time constitute the unity with respect to that by whom and through whom they have been created. One can speak of a “theogenic” homogeneity of the universe, as that which “is situated” at the equal “separation” (*diastema*) from the Logos who creates the universe.<sup>85</sup>

Theology treats humanity made in the Divine image as microcosm and mediator, whose task was to bring the universe to the union with

84. Clément, *Le Christ, Terre des vivants*, 91.

85. See an explication of this idea in A. Nesteruk, “The Cosmos of the World and the Cosmos of the Church: St. Maximus the Confessor, Modern Cosmology and the Sense of the Universe,” in *Knowing the Purpose of Creation Through the Resurrection*, ed. Bishop Maxim (Vasiljevic) (Alhambra, CA: Sebastian, 2013), 297–333. (A shortened version of this paper can be found in *The Messenger: Journal of the Deanery of Great Britain and Ireland*, Part 1: N 22 (March 2013): 13–36; Part 2: N 23 (July 2013): 16–32). See also A. V. Nesteruk, “Man and the Universe in Patristic Thought: the Teaching of Maximus the Confessor and Modern Cosmology,” *Journal of Siberian Federal University. Humanities & Social Sciences* 7, no. 6 (2014), 959–991.

God through overcoming the divisions (*diairesis*) in created being.<sup>86</sup> In application to the modern view of the universe this would mean the overcoming of its split into causally disconnected regions, into lifeless eons and lethal forms of matter. Relating this to what has been said before, the transfiguration of the universe would imply the overcoming of its perception through the prism of “cosmic homelessness,” non-attunement with it and incommensurability with it. Human beings, brought into the universe without their consent and doomed to the “cosmic mediocrity” of its spatial location asserted by the cosmological principle, can transfigure the universe, that is, to think of it and participate in it through the creative love of God, in which the cosmic “abyss” of its indwelling will become a symbol that calls the human being for another infinite “abyss” of living in God. The predicament of humanity is that its cosmic duty, and its initial image originating in the Creator, underwent a catastrophic transformation in that metahistorical event which theology calls the Fall.

Leaving aside the details of the theology of the Fall, it is important for us to understand what is the meaning, in the context of knowledge of the universe, of a theological conviction that we see the universe through the eyes and mind distorted in comparison with that which was implanted in the lost Divine image. Where does theology see that boundary in knowledge which separates our vision of the universe from that one which was granted to the incarnate Christ as its creator and carer? Theology defines the human condition after the Fall in terms of the so-called “garments of skin.”<sup>87</sup> Sometimes the “garments of skin” are associated with corporeity. However, for us it is important to concentrate on, so to speak, the epistemological

86. See more details on these divisions—for example, in Thunberg, *Microcosm and Mediator*, ch. 6.

87. The details of theology of “garments of skin” can be found, for example, in Nella, *Deification in Christ*, 23-104.

consequences of the “garments of skin.” Since all aspects of human activity, including exploring and learning of the universe, are related to the postlapsarian condition, our sense of reality of the universe and of our place in it is affected by that obscurity which was imposed after the Fall on the initial human faculties. According to the teaching of the church, before the Fall it was the unity between man and the universe through which the universe was to follow man to its “end,” analytically described by Maximus the Confessor in *Ambigua* 41 as the overcoming of divisions (*diairesis*) in creation. Man’s transgression set nature off course, making it develop in enclosure with itself, isolated and blind, devoid of any *telos* and doomed to futility. Matter was deprived of its development toward the spirit; it stopped being humanized and being subjected to transfiguration. Humanity did not change its place in creation, but it did change its *relation* with creation and hence its perception and understanding of the created universe, its sense and meaning as related to the task of mediation, which was handed to man and which he did not fulfill. What is characteristic for the present condition is not only related to deceptive desires and passions, but that the very process of learning of the external world is the direct consequence of this condition as the necessity of adaptation and biological survival as well as the still archetypically present, but obscured, desire to grasp the sense of humanity in the universe. Maximus the Confessor refers to that initial “wisdom” granted to man whose loss led to the demands of scholarship and learning. And the learning itself is the result that there appeared between man and God some obstacle, some division which, in order to be overcome, must be studied. The very process of learning of the world is treated by Maximus the Confessor as the loss of superiority, the lordship of man over creation.<sup>88</sup> This leads humanity to see the universe in the

88. Maximus the Confessor, *Ambigua* 45, PG 91, 1353C-1356A.

image of its own moral decline, so that man builds the world in its own image, that is, the image of the Fall.<sup>89</sup> As was expressed by O. Clément, “creation is distorted in man—‘dust you are and to the dust you will return’ (Gen. 3:19),—by replacing the mystery of the unity in plurality by knots of appearance, the individual or collective phantasms. The imaginary worlds of individuals and groups intersect without ever coinciding in the hereditary illusion which distorts the world. Man ceases to see the real world, that which God created in his glory, *because God is not revealed in creation*. He sees the universe in the image of his decline and makes the world in his image.”<sup>90</sup>

Theologically speaking, the learning activities that are pursued by the sciences represent the content of what is meant by the garments of skin. This entails an important conclusion: the vision of the world through human consciousness dressed in the garments of skin is limited by this very fact. There is a natural limit in such a knowledge, which means that our vision of the universe is limited by that “moment” in the past of human history beyond which our consciousness cannot make any insight because it is itself functioning in the conditions of the garments of skin which have some originary connotations. In other words, while exploring the world human consciousness finds its own limit, its boundary and its hidden foundation which it cannot explicate, that is, answer the question of its own facticity. This consciousness projects this limit onto the world through different sciences. Citing once again O. Clément, “the discoveries of geology and paleontology inevitably stop at the gates of Paradise because it represents a different modality of being.” The same can be said about cosmology: there is an absolute limit in all speculations of the universe in what concerns its remote past. The idea of the Big Bang manifests itself not only as a methodological

89. Clément, *Le Christ, Terre des vivants*, 102-3.

90. *Ibid.*

limit in scientific knowledge of the universe by man; it represents a limit in understanding of the origin of the present state of human consciousness as such, that is, the mystery of this consciousness. The cosmology of the Big Bang leads consciousness to the “gates of Paradise” in the sense that this same consciousness understands that it is rooted in something that it cannot explicate, but whose archetypal memory is retained.<sup>91</sup> The meaning of what we have called above the “positive incertitude” of science can be reexpressed by saying that science is functioning in the conditions that theology calls the Fall and it “cannot get above the Fall, because it is included in such a cosmic modality which is provoked by it and because it is inseparable from the temporal, spatial and material conditions which have appeared as a result of destruction of the state of paradise.”<sup>92</sup> The presence of material references that are transient and spatially varied creates the “incertitude” of scientific knowledge as related to this age, that is, to the age that retains only glimpses and shadows of the “age to come” lying in the foundation of the present display of the universe. That which cosmology calls evolution of the universe, represents, in a spiritual sense, the process of objectification, a *diastatic* split in “all in all,” the alienation of the first Adam as the universal Man, including humanity in its totality and the universe. The Big Bang, in this vision, becomes a cosmological symbol of the Fall, of the inception point of that cycle of physico-biological existence in which humanity became involved as a result of its transgression. The trace of the Divine image in humanity, however, is retained at least in that

91. One can find similar ideas in Bishop B. Rodzyanko, *Theory of the Universe's Decay and Faith of the Fathers: Cappadocian Theology—the Key to Apologetics of Our Time* (Moscow: Palomnik, 2003) (in Russian), as well as in Fr. S. Sokolov, *The Other World and the Time of the Universe: Time and Eternity* (Moscow: Kovcheg, 2008) (in Russian). See my commentary on Rodzyanko's ideas in A. Nesteruk, “The Problem of Faith and Scientific Knowledge in Russian Religious Thought of the 19th–20th Centuries,” in *Interpreting Nature and Scripture*, ed. J. M. van der Meer and S. Mandelbrote (Leiden: Brill Academic, 2008), 395–99.

92. Clément, *Le Christ, Terre des vivants*, 106.

this same humanity can critically assess and explicate the meaning of the Big Bang theories.

All that we have described as the present human condition and its effect on knowledge of the universe, nevertheless, does not diminish the positive aspects of the garments of skin, for they were granted to humanity after the Fall with the purpose not only of physical survival, but of the recreation and renewal of those obscured aspects of being created “in the image of God,” which were not destroyed and did not perish entirely. God did not strip human beings of their reason, as a manifestation of dominion over creation, and it is through the empirical and theoretical acquisition of the outer reality, that is, through knowledge and scientific practices, that the world was shaped in a coherent image of the cosmos. However, the most important and constructive positive usage of the garments of skin comes from the inherent possibility to search through the world in flux and mutability for the permanent good and the foundation of the world, that is, as we said before, to preserve an essential dimension of the human condition to transcend the world, that is, to resist being spiritually suppressed by the immensities of the universe through which cosmology portrays man as its speck of dust, to retain in humanity its difference from the world, its centrality to creation through archetypical memory of the initial communion with God.

In light of our previous discussion the theological commitment makes it possible to interpret cosmological theories, related to physical reality involved in flux and decay as those elements of instability and disorder, causing anxiety and despair in human hearts dressed in the “garments of skin,” which advance them back to the archetypical state, that is, toward that which is beyond it, to that which, in a paradoxically temporal sense, belongs to the age to come. It is only through the reversal of the “path of Adam” through spiritual insight into the sense of creation, as the process directed to the



future, that the task of relating the universe to its creator can be fulfilled. The theological commitment makes it definite that the sense of cosmology can only be unfolded if its study is going on along the lines of the “positive” use of the garments of skin, that is, the recreation of that hidden impetus which is left latent in humanity since its creation “in the image.” This constitutes an unavoidable existential and theological commitment to any dialogue between science and Christianity. Correspondingly, the objective of this book is the explication of the Divine image in humanity through studying cosmological theories; its methodology is the positive use of human consciousness of the universe dressed in the garments of skin in order to reveal and restore that archetypical memory of “all in all,” that is, the vision and communion with the universe through communion and union with God.

### Concluding Remarks

As a result of a long discussion of the philosophical and theological objectives of this book, one can state its *credo* in an encapsulated form. The existential and phenomenological explication of the theological commitment in modern cosmology as the unfolding of the sense of the universe from within communion events entails that cosmology, in a way, turns out to be “subordinated” to anthropology. Philosophically this means that the interpretation of cosmological ideas is based on the epistemological centrality of humanity as such a kind of being from within which that which is called “the universe” is disclosed and constituted. Theologically, this means that the sense of the universe is established from within the relations between God and man, that is, from within a concrete earthly history being an arena for these relations. As was expressed by C. Yannaras, if “the entire fact of the world to be constituted as an existential fact, then every

reality is recapitulated in the relationship of humanity with an active reason (*logos*) as an *invitation-to-relationship*, which is directed towards humanity alone.<sup>93</sup> In both philosophical and theological aspects of such an approach to the universe one can find a phenomenological reversal of the anthropological problem: humanity is not inserted in the allegedly preexisting cosmic history but, on the contrary, cosmological evolution has its origin in the history of the human as that primary and inherent existential beginning of any possible articulation of the world. This beginning expresses that which G. Marcel called the initial and unresolvable mystery of human existence.<sup>94</sup> It is that mystery which is associated with the fact of humanity's creaturehood, its mystical coming into being through the act of the Divine love. It is the stance on the spiritual centrality of humanity in the universe and the presence of the Divine image in articulations of the universe that constitutes the essence of the theological commitment in studying the universe. A phenomenological method of treating the content of cosmological theories as the content of human experience, so to speak, their interiorization by the ego, explicates a simple eidetic truth that cosmology manifests the spiritual condition of humanity, that condition which is subjected to a trial of free-thinking of the universe. Physical cosmology mercilessly dooms human beings to homelessness in the universe, their mediocrity and effective nonexistence in the divided, and sometimes non-consubstantial layers of physical reality. By so doing it subjects the human spirit to a severe test of resisting despair and oblivion and encourages transcendence, that is, the sense of its commensurability with the eternal as the God-given ability to contemplate all temporal and spatial extensions

93. C. Yannaras, *Postmodern Metaphysics* (Brookline, MA: Holy Cross Orthodox Press, 2004), 137.

94. Marcel, *Being and Having*, 24.

(*diastema*) as having origin in the same otherness of their creation that consciousness has.

If one places such a vision of the universe in a cosmographic context, the resulting “spiritual cosmology” turns out to be geocentric, because it is anthropocentric. However, this egocentricity has a theological foundation, for the meeting of God with humanity took place on earth and it is in this event through which the basic divisions in creation have been archetypically overcome and brought to the unity. Then that geocentrism which pertains to the fact that the universe is disclosed from a specific and contingent location in the universe becomes an expression of the Christocentric essence of cosmology, for the very possibility of the integral knowledge of the physically disjoint world has its origin in the archetype of the Divine image in man, that is, of Christ, understood not only as a carrier of the human nature, but also as the Logos-Word of God who did not cease to be at the right-hand side of the Father and who continuously sustains creation and its economy at all scales and all remote corners of the universe. It is this archetype, when Christ is treated as the Lord of the world (Rev. 1:16), which is gifted to humanity in order that it could know the universe at scales that incommensurably exceed in depth as well as at large the physical and biological parameters of human existence. One can say that the very possibility of knowing the universe becomes in a certain way the experiencing of the event of the Incarnation of the Lord of the worlds from within which the universe manifests itself as an event of human history.

If, for a moment, one disregards a theological stance on human existence and approaches it on the grounds of the physical and biological, as well as cognitive facticity, including the faculty of rational comprehension of the world, the universe will appear to us from within the transcendental delimiters that pertain to the human condition. The universe is constituted from within these delimiters

so that the picture of the universe comprises not only that which can be phenomenized, that is, represented as objects, but the very conditions of the possibility of such a constitution. The possibility of elucidating these conditions in the strict discourse of the natural sciences seems to be doubtful. If one assumes that the cognitive faculties as well as human reason have foundation in something physical and biological, one loses here the problem of hypostatic, that is, personal existence, for personhood is that aspect of the individually unrepeatable, isomorphic to the world's existence with respect to which science can only think in terms of riddles. It is because of this that theology enters a cosmological discourse as a pointer to that from which the transcendental delimiters in the constitution of the universe can originate, namely to the Divine image in man. In this sense the explication of those epistemic procedures that are employed in cosmology, in its essence, will be the explication of content of the idea of the divine image in man, or, to be more precise, of that impetus which is still acting in humanity's postlapsarian condition and which attempts to restore the distorted image. Correspondingly, the method of such an explication, based in transcendental philosophy and phenomenology, becomes intrinsically manifest in that theological commitment which is implicitly present in cosmology. Our desire to reflect upon knowledge of the universe from within the experience of life corresponds to that endeavor of the modern philosophy of religion which overcomes that which Heidegger named "ontotheology." In view of the objectives and tasks of the present research, this would mean the overcoming of "ontocosmology" as that abstract science of the universe as a whole which, ultimately, in analogy with ontotheology must lead to the "death of the universe," certainly not in a physical, but moral sense, as that kind of being which is devoid of the value and beauty by which the cosmos of ancient Greeks was filled in.

It is the reader who must judge as to what extent this project will have succeeded. Since, in contrast to the existing vast collection of volumes on philosophical theology with phenomenological interventions, there are practically no books on philosophy of cosmology written through the prism of theological commitment, the author is conscious of the fact that his project is novel and original. He takes responsibility for all its faults and is ready for a critical collaboration with all.

There is a note on bibliography. Unlike the books on Christian theological cosmology, the list of references on physical cosmology amounts to an astronomical figure, increasing on a daily basis through journal publications and Internet archives. This is the reason why we quote only recent major monographs that summarize cosmological research up to a certain date, reducing references to journal publications and electronic archives to a minimum.