

## EVIL AND HOPE IN DIALOGUE WITH COSMOLOGY

What precisely is the nature of the problem of evil and the response of hope anticipated when theologians turn to the discipline of cosmology? Is it first of all an image of physical evil? Is it the experience of personal or individual suffering, the suffering of our neighbor who is the victim of chance process, arbitrary events or some form of ill luck, an evil whose origin is not attributable to the action of others? Is it the appearance of disorder in cosmic order, equilibrium or harmony? Is it an increased awareness of randomness, contingency and chaos in a universe on the move? Is it associated with a view of the privation in the order of being? Are these questions sharpened theologically by an idea of God's providence, the notion of God as creator who is Goodness itself and who is otherwise solicitous toward human beings, yet, in the face of tragic events and victimization, appears enigmatically absent or silent?

If such images resonate with basic assumptions regarding the topic of evil and hope which we bring to our dialogue with cosmology then we should not expect immediate answers. For I do not believe cosmology is interested in such issues! Cosmology, I submit, neither asks nor addresses the question of evil. I shall give reasons for this position in a moment. First, I wish to add another qualification related to the dialogue between theology and cosmology.

There is no direct relationship between the findings of cosmology and theological questions. One of the major obstacles to creative dialogue between faith and science is an oversight regarding the fact that cosmology and theology are two distinct disciplines. This relates to an oversight regarding the meaning and operations which define a discipline as a discipline.

If a discipline represents a systematically ordered set of propositions gathered into theories which are based on the relationship between a delimited set of questions and anticipated forms of answers to these questions, a relationship guided by the rules of method appropriate to the nature of data defined by that set of questions and anticipated answers, then there is no reason to expect that the findings of one discipline should impose their rule on judgments of another.

To give an example: John Polkinghorne in his book *Reason and Reality*<sup>1</sup> has written a concluding chapter on "the Fall." He announces at the beginning of this chapter that he considers this doctrine to be the most difficult to reconcile with

---

<sup>1</sup>John Polkinghorne, *Reason and Reality: The Relationship between Science and Theology* (Philadelphia: Trinity Press International, 1991).

the findings of modern science.<sup>2</sup> Similarly Peacocke in his 1993 Gifford Lectures writes that the findings of modern science challenge the traditional theological notion of original sin.<sup>3</sup>

First, I believe they are right in the sense that modern cosmology has difficulty accommodating the Fall. Secondly, I do not think that this by itself is sufficient reason for theologians to give up a reference to original sin. Not because scientific knowledge should not, without further question, be granted normative status; rather, because theologians may too quickly appropriate cosmological meanings when they interpret doctrines whose reference is faith experience. Original sin is a function of a world of meaning whose reference is salvation history; secondly, and more importantly, original sin does not refer to an event in the order of historical or cosmic origins; its primary reference is the event of the Resurrection and the meaning of baptism in Christ. If it has come to constitute a problem in debates between cosmology and theology it may well be because we, as theologians, must also be more vigilant in articulating the structure of meaning and discourse which defines our own discipline.

Does this mean that the discourses of cosmology and theology are incommensurate and that we must be content with having identified two distinct, if not separate, orders of understanding which coexist in a larger realm of human language? Were this so, I would not be proposing a theological reflection on evil and hope in dialogue with cosmology. Moreover, while the fragmentation of disciplines is a real challenge to the order of human discourse,<sup>4</sup> I view the differentiation of disciplines as a function of an understanding of the possible unity of human discourse, not its frustration. But unity is not totalizing representation; rather, it is a viewpoint from which one understands the mediation of disciplines.<sup>5</sup>

I have taken this time at the beginning of my presentation to focus on the question of the mediation among disciplines because I believe it is vital to the way we pose such a question as that of evil and hope in dialogue with cosmology. If we continue to relate too quickly the findings of one discipline to those of another without attending to the nature of the mediations among the disciplines themselves, then we continue to apply inadequate criteria when applying the findings of one discipline to judgment of another. We may explicitly

---

<sup>2</sup>Ibid., 99.

<sup>3</sup>Arthur Peacocke, *Theology for a Scientific Age: Being and Becoming—Natural, Divine, and Human* (Minneapolis: Fortress Press, 1993 [1990]) 247-48.

<sup>4</sup>See Bernard Lonergan, *Insight: A Study of Human Understanding* (New York: Philosophical Library, 1957) xiii. Paul Ricoeur, "Existence and Hermeneutics," *Conflict of Interpretations* (Evanston: Northwestern University Press, 1971) 16.

<sup>5</sup>Jean Ladrière, "Science, Philosophy and Faith," *Language and Belief* (Notre Dame: University of Notre Dame Press, 1972) 117-18. Bernard Lonergan, *Method in Theology* (New York: Herder, 1972) 72.

reject such attempts. However, if in our dialogue such assumptions are inadvertently operative, we fall prey to a theory of reductionism with respect to the constitution of meaning in human language.

With this in mind, our first task is threefold: first, to clarify the first thesis, namely, that cosmology neither asks nor addresses the question of evil. I shall do so by showing how cosmology is a higher viewpoint discipline with regard to the distinct empirical scientific disciplines. This being done, we shall then have to ask where the question of evil and hope, with a view to better posing this question, more properly emerges. This will lead to my second thesis. Following Paul Ricoeur, I shall maintain that a response to the question of evil and hope emerges in the context of practical reason, where a reflection on human action is taken up. This being said, I shall maintain that such a shift in the locus of the question of evil and hope outside cosmology does not abandon a dialogue with cosmology. Rather, I shall argue, thirdly, that the vantage point of a reflection on human action will become a privileged position from which to return to the developments of cosmology. Furthermore, I wish to show that an attention to action plays its own indispensable role in the mediation between theology and cosmology. However, we must recall that we approach this dialogue as theologians, and it remains our responsibility at this point to show in what way theology draws on its own resources of meaning in order to offer a horizon of self-understanding and our participation in the world which is not simply governed by a response to evil, but lives out of the surplus of hope which defines the very question and problem of evil itself.

#### Thesis I

### COSMOLOGY NEITHER ADDRESSES NOR ASKS THE QUESTION OF EVIL

Our aim is to explore a way of developing a dialogue between theology and cosmology concerning the issue of evil and hope. The formulation of our first thesis is not intended to discourage such a dialogue but to clarify the locus and nature of the question. For this reason, I believe a word about cosmology as a discipline is in order.<sup>6</sup> This will allow us to say something about the object of inquiry in cosmology and its corresponding strategies of meaning. I will also say a word about the relationship between cosmology as a discipline and other scientific disciplines. If cosmology neither addresses nor asks the question of

---

<sup>6</sup>Our approach to cosmology is at the level of a second order discourse. We shall not be examining the different models in modern cosmology, a task best left to specialists in the field itself. Rather, we shall be exploring, at different levels, the notion of world operative in the question of cosmology itself and how this contributes to an interpretation of the role of the discipline. Regarding second order discourses, see on the topic Milton K. Munitz, "On the Use of 'Universe' in Cosmology," *The Monist* 48 (1964) 185-94 at 188.

evil, it is my hope, nonetheless, that a development of these features will in the long run set the conditions for a possible dialogue with theology with regard to a response to evil in the context of the development of a language of hope.

### *I. a. Cosmology as a Discipline*

It is always tempting to be attracted by the recent findings and discoveries of cosmology. Modern science has gained a significant foothold in contemporary culture due mainly to its critical approach to reality, an approach whereby it is aware of its method and operations as a discipline.<sup>7</sup> Recently, Arthur Peacocke, in his discussion on the relationship between theology and science, has drawn special attention to the structure and order among the research disciplines and their significance for thinking the relationship between findings of one in relation to findings of another.<sup>8</sup> Still, going beyond Peacocke's own approach, we would argue that cosmology, while normally associated with empirical science, especially astrophysics, is not an empirical scientific discipline similar to physics, chemistry and biology. Cosmology is a threshold discipline. With respect to its object of investigation, relevant data, order of questions, and methods, cosmology plays a special role in the transition from empirical disciplines to the human and social sciences.<sup>9</sup> In relation to empirical disciplines cosmology represents an effort to systematize, to stretch the findings and heuristics of the empirical disciplines to a point where there is an encompassing interpretation of the world.<sup>10</sup> Cosmology asks the question of the world as world, its structure, order, genesis, emergence, etc. as world.

This effort to systematize, however, is not simply an extension of the findings of the distinct empirical sciences.<sup>11</sup> First, though its approach closely resembles investigations based on scientific observation, cosmology is not a discipline whose propositions and theses identify laws of empirical processes. As M. K. Munitz has indicated, empirical disciplines set up procedures to test laws that hold under similar conditions. But there are no laws of the universe; for, in cosmology, there is only one universe which is the object of investigation. There

---

<sup>7</sup>Jean Ladrière, *The Challenge Presented to Culture by Science and Technology* (Paris: UNESCO, 1977) 94.

<sup>8</sup>Arthur Peacocke, *Theology for a Scientific Age*, 214-18.

<sup>9</sup>Milton K. Munitz, "The Logic of Cosmology," *The British Journal of the Philosophy of Science* 13 (1962) 34-50. Jean Ladrière, "Faith and Cosmology," *Language and Belief* (Notre Dame: University of Notre Dame Press, 1972) 150.

<sup>10</sup>In addition to his "Logic of Cosmology," see Milton K. Munitz, "On the Use of 'Universe' in Cosmology," 48 (1964) 185-94, and Milton K. Munitz, *The Question of Reality* (Princeton NJ: Princeton University Press, 1990) 173-91. Jean Ladrière, "Le Principe anthropique. L'homme comme être cosmique," *Cahiers des Ecoles des Sciences Philosophiques et Religieuses* 2 (1987) 7-31, at 12.

<sup>11</sup>Ladrière, "Faith and Cosmology," 153.

is no other universe that can be found to test out the "laws" governing universes.<sup>12</sup> Even the most advanced developments in particle physics involves a constant exchange with cosmological speculations whereby the universe is conceived as the only available laboratory in which theories can be explored.<sup>13</sup> This does not forbid us from attempting to identify large scale structures of time and space which define the empirical structure of the universe. But whatever the validity of these findings, we should be cautious about assuming that the universe is either a "body" or an imagined circumscribed unity which is the object of investigation. In this respect, cosmology is a discipline distinct from empirical sciences.

Cosmology is a leap in the order of a discipline. As a discipline which asks about the structured order of world as world, it assumes responsibility for bringing into focus the heuristics of a world which guide investigation in the individual empirical disciplines. If the distinct, empirical sciences aim to grasp an understanding of features of empirical reality which are defined by a specific order of questions leading to the formulation of specific laws, cosmology articulates the anticipated structure of world as world. It seeks to articulate the foundation of that operative notion of world as a reality which guides investigations.

What is that reality which progressively manifests itself in the ongoing investigations and findings of the disciplines? The notion of world which is not simply the results of the findings of one specific discipline, yet permits the investigation of that discipline to be effected in the confidence that there is something to be known, in the confidence that there is a structure and constitution to the world, which permits the complex of individual sciences to take the form they do, that "reflexive" moment where scientists ask what is heuristically operative throughout their empirical investigations—that is what attracts the attention of cosmology. In this sense, then, cosmology is a leap in the order of a discipline with respect to regional empirical sciences. For, with such a question a new order of questioning and corresponding strategies of meaning and language are engaged. This is why cosmology is oftentimes referred to as a myth.<sup>14</sup> Not in the sense that it is purely fictitious. Rather, in the sense that there is introduced an order of understanding that exceeds the limits of constative discourse (that is, laws and propositions).

I have referred to cosmology as a leap in the order of a discipline in order to highlight how the reflexive grasp of the order of world as world becomes explicitly operative in our interpretation of the universe. This being said, a "leap" does not imply an overcoming and leaving behind. Were this true, the "myth" may become a pure theory or a model of structured processes and relationships

---

<sup>12</sup>Munitz, "The Logic of Cosmology," 35-37.

<sup>13</sup>David Lindley, *The End of Physics: The Myth of a Unified Theory* (New York: Basic Books, 1993) 155-56.

<sup>14</sup>Mary Hesse, "Cosmology as Myth," *Concilium* (1983) 49-54.

which assume a purely aesthetic value. The strength of one cosmology in relation to another is whether it allows the empirical sciences to be empirical sciences and to do their work as empirical disciplines. The truth of cosmology is the increasing validity and the growing complexity and autonomy of distinct empirical disciplines as disciplines. I shall address two specific implications, one of which concerns the notion of order, the other a notion of finality.

### *I. b. Cosmology and a Notion of Order*

First, cosmology bears implications for our understanding of order in the universe. It would be easy for us to assume common sense notions of order and disorder in the universe and apply these to our idea of cosmology. However, if modern cosmology admits a notion of world whose intelligibility is what guides the investigations in the empirical disciplines, we must not overlook the fact that the operations which define the methods of disciplines are those of the formal disciplines (e.g. logic, mathematics and geometry). Modern science and cosmology are what they are due to advances in logic, mathematics and geometry. The form of the questions, the anticipated forms which answers will take to these questions, the methodological strategies which guide the movement from data to theory, all are under the operative rules of the formal disciplines. When we speak of a model in science, we ask about a structure and set of operations and relationships. The language of these models is mathematical. A model becomes a way of investigating empirical reality. Scientific questions anticipate a structured identifiable unity whose concrete existence lends itself to an intelligibility which correlates with the model of operations whose language is that of a formal science.<sup>15</sup> If, as was the case in the transition from classical to quantum physics, we come up against the limits of a formal discipline, it does not mean there is a lack of intelligibility or order. Rather, it spurs on further developments or applications in the realm of the formal disciplines themselves. The principle of indeterminacy is not the end of intelligibility; it is the beginning of a better appreciation of the applicability of probability and statistics as they become a means to explore the intelligibility of events.<sup>16</sup> The result has not been the impoverishment of either the formal or empirical disciplines; rather, it has led to their enrichment and, for us, an enriched interpretation of the world, especially an emergent order in the universe.<sup>17</sup>

I have been referring to the relationship among cosmology, the regional empirical disciplines and the formal sciences. I have done so in order to identify an effort to systematize an intelligibility of order that is foreign to assumptions

---

<sup>15</sup>Ladrière, *The Challenge Presented to Culture*, 24, 35. See also Lindley, *The End of Physics*, 175.

<sup>16</sup>Ladrière, "Le principe anthropique," 11-12.

<sup>17</sup>Jean Ladrière, "Physical Reality: A Phenomenological Approach," *Dialectica* 43 (1989) 127-39.

about disorder and evil. As I said at the outset, my aim was to bring to the surface and test our assumptions about order with respect to the question of evil. I do not wish to suggest that the question of evil disappears. But certainly we must be attentive to the presuppositions about order we bring to our questions and how we formulate them. For example, based on what we have just said, it is understandable why evil has for so long taken the form of a theodicy. Given its relationship through the empirical disciplines to the formal disciplines, cosmology has become a discipline which appropriates forms of rationalized order. If we bring the question of evil to cosmology anticipating a reply which would explain a deficiency in a preconceived notion of order, it is evident that the question itself will be difficult to answer. For cosmology is not interested in this. However, this is far from the last word about the potential contribution of cosmology with regard to the question of evil. It is important to pursue the relationship between cosmology and the distinct empirical disciplines in order to underline the significance of our appreciation of the facticity of the world. This calls for remarks on finality.

#### *I. c. Cosmology and the Distinct Empirical Sciences*

If the notion of world in cosmology is related to a notion of the unity of the world, then the world is more than simply the summation of the total concrete existing entities.<sup>18</sup> Yet, the place where the unity of the world manifests itself is the realm of full set of the distinct empirical disciplines.<sup>19</sup> Disciplines aim for knowledge of facts, that is, to make judgments about what concretely and empirically exists. The structure of the relationship among the disciplines themselves corresponds to an interpretation of the emergent order of the universe as it is known to exist. In other words, the findings of the contemporary disciplines are not simply isolated findings and disparate facts about parts of the universe. The movement of the structure of the disciplines taken together corresponds, as a total structure of knowledge, to the movement of life itself. No one discipline by itself comprehends this. But, if it is the responsibility of cosmology to reflect on the total order of the world as one, a privileged place for this is found in the unity of distinct disciplines.

Given this, we can characterize the world as world on the move, as a world that bears a direction. I would caution against too quickly using the word "teleology" to name this movement, or, in a respect for perspective of science itself, to speak of "purpose." For this reason, I refer to facticity, that is, concrete existence known by the disciplines themselves. In this sense, I would prefer the

---

<sup>18</sup>Ladrière, "Faith and Cosmology," 150.

<sup>19</sup>These ideas are inspired by a reading of chap. 15, "Elements of Metaphysics," in Lonergan's book *Insight*. See also Jean Ladrière, "Science, Philosophy, and Faith," in *Language and Belief* (Notre Dame: University of Notre Dame Press, 1972) 117-48.

word "finality."<sup>20</sup> Finality allows us to speak of the ongoing self-organization of the world.<sup>21</sup> There is an isomorphic relationship between the structuring differentiation of the disciplines and our understanding of the world involved in a process of self-organization or self-finalization. Increasingly, the large scale structures of time and space are a function of an interpretation of the world whose specific character is emergence and whose focus is the increasing complexification and self-organization of life. The foundation of a notion of nature is related to this. It reflects the emergent understanding of order that is accounted for in the order of knowledge represented by the total order of disciplines themselves.

Following Ladrière,<sup>22</sup> we may characterize this notion of nature briefly as follows: if we can speak of self-organizing, self-structuring world, it is first with an eye to structures of forms of life and not simply a stable body. The structures of forms of life are defined by constant interactions. What is fascinating, according to Ladrière, is that these structures maintain their own forms throughout the flux of interactions and, in addition, are able to communicate the program of their own structured interactions so that new forms of life are born and interact with an environment. In turn, more complex forms of interactions develop which become more and more autonomous with respect to their potential behavior in specific environments. Thus, we speak of the genesis and emergence of more complex forms of life (more centralized and internally organized) as a way of identifying not only transformations but the transformations moving in a direction. A further way of identifying direction and transformation is to speak of performance.<sup>23</sup> Its value is that it allows us to grasp a "unifying principle" at work and shed greater light on the principle of structured operations and their dynamisms. In this respect, for Ladrière, a vision of nature is at once a vision of a project,<sup>24</sup> yet not one involving predefined or selected ends. Rather, it is a recognition of self-finalizing processes operative in nature itself by virtue of which nature manifests itself.

From this perspective it becomes understandable why contemporary cosmology speaks of an anthropic principle. For the emergence of human reflection

---

<sup>20</sup>On finality, see esp. Jean Ladrière, "The Role of Finality in a Philosophical Cosmology," in *Evolution in Perspective: Commentaries in Honor of Pierre Lecomte du Nouy*, ed. George N. Shuster and Ralph E. Thorson (Notre Dame: University of Notre Dame Press, 1970) 71-105. See also Lonergan, *Insight*, 444-45, and David Tracy, "Cosmology and Christian Hope," *On Naming the Present: God, Hermeneutics, and Church* (New York: Maryknoll, 1994) 73-81.

<sup>21</sup>In using the term "self" in "self-organization" I am simply referring to the autonomy of the world as world.

<sup>22</sup>Jean Ladrière, "Anthropologie et cosmologie," *Etudes d'anthropologie philosophique* (Louvain: Editions de l'Institut Supérieur de Philosophie, 1980) 154-66.

<sup>23</sup>Ibid., 158.

<sup>24</sup>Ibid., 160.

is not simply the place where world becomes aware of itself. It is also the factual testimony of a structure of the "history" of the universe.<sup>25</sup> From the side of cosmology itself it is the manifestation of the world as world in its unity as world, but a world whose manifestation has a direction. The accent is on the world "falling forward," as it were, in a process of self-organization. From the side of the relationship with the disciplines it is a differentiated unity that resists, by virtue of our knowledge of the concrete, a schema of knowledge whose intention is a complete theoretical representation forgetful of the differentiated and autonomous order displayed in the plurality of disciplines.

We shall have reason to return to this point later. For the moment we simply wish to accentuate the significance of the concrete and a corresponding notion of finality based on an understanding of the interaction between cosmology and the empirical disciplines.

What are the implications of these reflections for the question of evil and hope? First, we recall the context of our remarks, namely, the hypothesis that modern cosmology neither knows nor addresses the question of evil. Modern cosmology, informed by its relationship to empirical sciences and these, in turn, informed by their relationship to the formal sciences, seeks knowledge of order. Concretely, this reaches expression in acts of judgment whose total set define a discipline for what it is. Modern cosmology represents the world in a process of self-organization. As such, cosmology is an act of comprehension which views the world from the side of conditions which contribute to a comprehensive integrating unity.

In this respect, we have identified a form of intelligibility in cosmology which corresponds more with a response to life than an explanation of life. For all cosmology's concerns with origins, its primary concern is what is "actualized." Origins are a function of this level of comprehension. There is thus a subtle though significant invitation to question the assumptions operative in the way we ask the question of cosmology regarding evil and hope.

Indeed, is there not a suggestion here that we must give up the way we ask the question of evil as it relates to an explanation or failure thereof with respect to an ideal of cosmic order and its conditions? Perhaps, following the suggestion of Ricoeur, the very question and nature of the desire disclosed by the question, needs to be abandoned. Our suggestion is that cosmology must situate itself anew in relation to this question by understanding its own form of its comprehension of the world. In short, a form of conversion is called for which reflects a leap in the order of self-understanding. If we bring the question of evil to cosmology, it does not mean that we need to begin with cosmology. We may begin elsewhere in order to engage the resources of cosmology in formulating a response.

How can this be effected? Is it not here that cosmology (and the relationship it enjoys with the empirical disciplines ) needs to find itself within the larger

---

<sup>25</sup>Ladrière, "Le principe anthropique," 30.

order and range of disciplines that configure human knowledge today? As Jean Ladrière argues, cosmology, in its attempt to develop a fuller systematic account of the unity of the world, must be on guard against an excess of totalization.<sup>26</sup> Cosmology asks about the order of the world as world. However, the differentiation of this comprehension of order of a discipline within which cosmology discovers itself is only possible given the limits of cosmology vis-à-vis order of the disciplines that disclose the dimension of human freedom and human action.<sup>27</sup>

## Thesis II

### PRACTICAL REASON AS THE LOCUS OF THE QUESTION OF EVIL

I propose, and this is my second thesis, that the question of evil and hope is more properly posed in the context of practical reason. Placing the question in the context of practical reason does not abandon cosmology; rather it seeks to return to cosmology, by way of thinking differently the question of evil and hope. I shall elaborate this in three steps.

First, it is important to diagnose more specifically the obstacle if cosmology remains the first locus of a response to the question of evil. Here, we shall comment on the mythic character of cosmology. Secondly, we shall identify the benefits of a shift to practical reason with regard to the way the question is posed and a response developed, one of which is an increased awareness of those who suffer. We shall show how this leads us to rethink our approach to cosmology. Once this is elaborated we shall then be in a better position to address more specifically the implications for the actual dialogue between theology and cosmology concerning the topic of evil and hope.

#### *II. a. Cosmology and the Limits of its Question of Origins*

The question of evil, Ricoeur has shown, has been constrained by the question of origins.<sup>28</sup> Not only has cosmology been in some measure responsible for this, but it remains itself captive to it to the extent that it has not reexamined the origins of its own discourse in myths of origin. Ricoeur has shown that the myths of origin constitute an "immense laboratory" within which human civilization and culture have attempted to test out their response to evil.<sup>29</sup> However, since these myths are myths of origin, the attempt has sustained the form of question that

---

<sup>26</sup>Ladrière, "Anthropologie et cosmologie," 161.

<sup>27</sup>Peacocke, *Theology for a Scientific Age*, 245-48.

<sup>28</sup>Paul Ricoeur, "Evil," in *Encyclopedia of Religion*, ed. Mircea Eliade et al. (New York, London: MacMillan, 1987) 5:200-207. See also Ricoeur's "Evil, a Challenge to Philosophy and Theology," *Journal of the American Academy of Religion* 53/3 (1985) 635-48, at 637, and his "Le scandale du mal," *Esprit* (7-8 juillet-août 1988) 57-63, at 59.

<sup>29</sup>Ricoeur, "Evil, a Challenge to Philosophy and Theology," 637.

has shaped theodicies: the question is *Why?*, *Why me?*—questions which seek explanations in the form of causes.

However, reflection on the nature of the response has exposed the futility of this approach. Such approaches encourage speculative reflection to draw on symbolic and narrative accounts in order to search for a response in the form of explanations, where explanation is guided by formal procedures and logic which anticipate a comprehensive, systematic rationalizing. But these fall short of the real enigma of evil. To the extent that modern cosmologies continue to appropriate the direction of meaning carried forward in these mythic strategies they are drawn into this speculative gravitational field where answers continue to be sought in origins, that is where we hope to discover the cause of evil. But though modern cosmology developed by appropriating such strategies, it must also become aware that its relationship to the forces of meaning in myth must be revised. A change in the order of the question of evil can be effected with a diagnosis of the bias of myth and a reeducation of the strategies of myth with regard to the meaning of origins. We saw in the first part of our presentation, that the meaning of such terms as origins and constitution may be refined if the emphasis is placed on the side of a comprehension attuned to the genesis of self-organization in the universe. In this respect the question is redirected toward emergence and not toward the past. However, cosmology cannot complete such a shift on its own. In spite of the developments in cosmology and its relationship to myth, cosmology remains bound to strategies and a logic of representation. At this juncture the resources of practical reason may shed considerable light on the problem.

Practical reason does not formulate a question in terms of explanation but in terms of action. It does not ask "Why this is so?" but "What can I do to respond to evil?" It seeks not a logic of the origin of evil as cause but a way of promoting the good. It transforms and transposes the question, placing a reflection on evil and hope within a discourse on freedom. This discourse, Ladrière reminds us, clarifies the cosmological discourse and makes it more apparent to itself.<sup>30</sup> How? Freedom enables a differentiated view of ends. Processes which define cosmology are one thing; patterns of intentional meaning that define ends of action are another. In cosmology, increasingly linked to self-finalization, the end is related to the emergent, actual order of processes. Action, related to freedom and its intentions, define its own ends and organizes structures of action ordered to those ends, namely, values.

Consequently, when we are invited to give up a form of a question of evil we do so in order to pose the question better: not simply in terms of "Why?" but in terms of "What shall I do?"<sup>31</sup> Thus, by adopting the form of the question

---

<sup>30</sup>Ladrière, "Anthropologie et cosmologie," 161-63.

<sup>31</sup>See Ricoeur, "Evil, a Challenge to Philosophy and Theology," 645.

which is posed from the perspective of practical reason we shall be in a better position to return to cosmology and explore its contribution.

### II. b. Advantages of the Approach of Practical Reason

Before we examine this, it is worth asking what some of the immediate advantages of such an approach are for the question of evil. One major advantage is that attention is transposed from suffering in general to persons who suffer. This, in two respects. First, if suffering can be identified as a condition of the flux, interaction or emergence of orders of relationships at a cosmic level, it remains at that level somewhat neutral. It is simply the result of the vicissitudes of ordering processes. Secondly, once placed in the context of action, suffering becomes attended to with the horizon of ends which freedom is able to define for itself. A sense of responsibility emerges<sup>32</sup> whereby I ask the question not simply "Why do I suffer?" but "What can I do on behalf of those who suffer?" The mutual recognition of persons within the order of ends, defined by freedom, opens up a space of the possibility in the form of a sense of responsibility and a horizon of hope. Failing this, those who suffer would simply be at the mercy of the neutral processes whose configurations define and determine the structure of the cosmos itself. Would this not lead us to fall back into a certain fatalism? Thus, one of the gains in transposing the question within the field of action is an attestation against a quasi-fate that would govern world process and human destiny. This does not mean that the forces of the cosmic processes do not exact their toll; but from the perspective of practical reason we can attest on behalf of the other that these are not the final word about the identity of the other.<sup>33</sup>

A second gain is that such an approach resituates the issue of origins in such a way that a path is opened to religious experience and faith. The form of the question guided by action "What can I do?" also takes the form "What can I hope?" Yet what is the foundation of such hope to which I may give myself? Such for Kant was the reply that takes the form, not of myth, but of religion.<sup>34</sup> Religion is the response to what can be hoped. This is not simply an extension of the logic of action. Religious experience is no more simply the extension of a logic of freedom than cosmology is the extension of the logic of the empirical

---

<sup>32</sup>Paul Ricoeur, *Oneself as Another*, trans. Kathleen Blamey (Chicago and London: University of Chicago Press, 1992) 113-39.

<sup>33</sup>Transposing the question of evil and the horizon of hope in such a way that the other whom I love becomes the concern was, in my view, one of the major achievements of the thinking of the existentialist philosopher Gabriel Marcel. See, e.g., his collection of essays in *Tragic Wisdom and Beyond* (Evanston: Northwestern University Press, 1973); also his philosophical autobiography entitled *The Existential Background of Human Dignity* (Cambridge: Harvard University Press, 1971).

<sup>34</sup>On the role of Kant in transposing the question of evil, see Ricoeur, "Evil, a Challenge Present to Philosophy and Theology," at 641-42.

sciences or action is the extension of the logic of cosmology. In his remarkable chapter on religion in *Method in Theology*, Bernard Lonergan speaks of religious experience as "being in love," an experience which "dismantles and abolishes" earlier horizons.<sup>35</sup> As such, this love is both "unrestricted" and foundational in the sense that it makes a total claim on the self. If it is not the simple extension of the logic of action it is nonetheless a matter of decision and freedom. With respect to freedom it places us before the universe in a new way. Not as the object of cognitional knowledge, not as the intended value of human action, rather, as an instance of God's own self-transcending love for the world.<sup>36</sup> Thus we move from experience to knowledge, a knowledge, writes Lonergan, which "is born of religious love" namely, faith.<sup>37</sup>

Such knowledge is a response to God's Word. As effecting Word it is also, to use another phrase of Lonergan's, "originating value," whereby the foundation of our freedom is an act of God's freedom. Thus, faith discloses a new horizon of hope, religious hope, the foundation of which is God's own love for the world. But, is that love really effective or not? The answer is not simply a formal one, it is an event of God's own action. It is effective in the progress of human freedom which makes its own a struggle on behalf of progress against the forces of decline. In this respect, Lonergan can write, "Without faith, without the eye of love, the world is too evil for God to be good, for a good God to exist."<sup>38</sup> In short, "faith," affirms Lonergan, "places human efforts in a friendly universe."<sup>39</sup>

We reach a point of highest existential drama in which the self must take a decision with regard to its own self. Dare I, in the face of evil, hope? It will belong to theology to explore the foundations of such a response in the context of faith experience.

But if I have sketched the manner in which action elicits anew the question of the origin of evil with regard to faith, it is not in order to show the need to go beyond cosmology but in order to elaborate a way back to the resources of cosmology in the context of a question not shaped by explanation but by the realism of hope. For as theologians we can too quickly move from action to faith.<sup>40</sup> If this is not to become a naive hope, a too quickly formed solicitude, it

---

<sup>35</sup>Lonergan, *Method in Theology*, 106.

<sup>36</sup>Ibid., 116.

<sup>37</sup>Ibid., 115.

<sup>38</sup>Ibid., 119.

<sup>39</sup>Ibid., 117.

<sup>40</sup>See Paul Ricoeur, "Existence and Hermeneutics." The distinct feature of Paul Ricoeur's hermeneutical philosophy in contrast to the tradition of Gadamer and Heidegger to call for a mediation of self-understanding that travels the long and arduous route of a passage via the methodologies of the different discourses. In this way, he retrieves the ontological moment called for by Heidegger, but refuses his all-too-quickly adopted path which goes around the developments in the modern disciplines. He has too quickly relegated them to the history of the forgetfulness of being. See also Ricoeur, *The Rule of*

must attend to mediations of action informed by hope. Faith seeks not to overcome or escape the vicissitudes of the world but to live them.

Thesis III  
RETURN TO COSMOLOGY VIA PRACTICAL REASON

I believe that it is via the density of human action that theology may enter into dialogue with cosmology, above all, because the ethical sphere is the sphere where such an encounter becomes possible.<sup>41</sup> First, the issue of faith can find in the realm of questions of human freedom a privileged access to issues related to salvation and human destiny. Secondly, the realm of human action offers an opportunity to return to the findings of cosmology and explore anew the significance of its findings in developing a response to evil and the development of a language of hope. The balance of my paper will address two features of this renewed consideration of cosmology. First, it reminds us of the structural features of action. Secondly, it concerns the significance of the body as a locus of action in response to evil and on behalf of hope.

*III. a. The Structural Dimension of Action*

We have spoken of action as an introduction to the sphere of human freedom where ends are an object of intention in their own right. Nonetheless, realizing value is not arbitrary. Action as the progressive realization of ends intended by human freedom must continue to be attentive to structural features and empirical conditions of action. Thus, if our question with regard to evil becomes "What can I do to resist, confront, work against, diminish evil?" the response must take into consideration action's own solidarity with the structures that make our world a world. In this context Ladrière writes that action without ceasing to be action rediscovers and reappropriates nature in the sense that action must mediate itself via structures of the world.<sup>42</sup> Action discovers its own structure analogous to the structural consistency of the processes of nature. The ends of nature are those which emerge by virtue of the flux of processes; the ends of action are self-determining and become an object of reflection, representation and responsibility. Nonetheless, action can only successfully realize these ends if it attends to the various conditions and structures that make for effective and sustained initiatives. This was the particular merit of the masterful text entitled *The Human Condition* written by the political philosopher Hannah Arendt.<sup>43</sup> Lamenting modernity's

---

*Metaphor: Multidisciplinary Studies of the Creation of Meaning in Language* (Toronto, Buffalo, London: University of Toronto Press, 1977) esp. the final study.

<sup>41</sup>See Ladrière, "Faith and Cosmology," 182-86.

<sup>42</sup>Ladrière, "Anthropologie et cosmologie," 162.

<sup>43</sup>Hannah Arendt, *The Human Condition* (Chicago and London: University of Chicago Press, 1958).

desire to be free of the constraints of earthbound existence, Arendt differentiated the meaning of action into labor, work and action itself. Action belonged to the cultural sphere where shared meaning and value were determined; yet, she argued, neither meaning nor value becomes the concrete good unless it is sustained by how we, as living organisms, pay attention to basic needs for bodily survival (labor) and how we pay attention to structures, routines of social organization (work) that sustain communities as an accelerator of conditions of quality of human living. Action, therefore, is not an appendage which can be dissociated from these two structural features. Action is an entire complex in which conditions for survival and schemes of social organization are appropriated within an intention toward meaning and value.

From the angle of nature, the entire structural conditions that shape the cosmic givenness of action are constitutive of the very possibility of action itself. As Ladrière argues, this should not invite us to develop a naive or simplistic image that identifies one direction for both nature and action.<sup>44</sup> A differentiation of orders and meanings must be maintained. The distinction between nature and action is highlighted. From this perspective of a higher order comprehension of the structural undercurrents of both nature and action we are led to appreciate even more the "plenitude of the concrete" and the "complex of mediations" which define action in its response to evil.

Before I go on to the second point, I wish to mention that I see in this framework a promising angle from which to approach contemporary questions related to ecology. While ecology evokes the idea of our relationship to nature, it is principally a question of human freedom and its ends. Ecological issues more properly emerge with an understanding of freedom and in the structure of the relationship between action and "nature." For this reason ecology becomes an issue related to justice. Not where ecology becomes a norm of action, but where action defines its own ends for itself, for example, justice, does there emerge the relationship of action to cosmic processes. In other words, justice is concrete. It directs our attention to conditions which sustain the good of order. These conditions relate in part, but nonetheless indispensably, to schemes of environment in nature.

Is it not our increasing awareness of structural conditions that shape environments of nature and human action which have brought justice related issues to the fore? If, however, this is not to become itself another ideological discourse, it must work its way through mediations related to ends and the emergence of this relative to the contexts in which shared meaning and value are identified. Insofar as cosmology as nature accentuates the self-finalization of increasing complex and differentiated emergent patterns of behavior with a particular attention to the significance of the flux of self-ordering interaction, and insofar as action needs to be mediated in a world, a new light is shed on the

---

<sup>44</sup>Ladrière, "Anthropologie et cosmologie," 165.

structural conditions which are indispensable for successful initiatives. In this way, we develop a response to evil but also sustain and realize those ends determined by an interpretation of justice and its hope. Along this avenue, action opens a dialogue between cosmology and theology. For action, aware of the differentiation of the notion of ends, is able to appropriate in its solidarity with the world and nature the entire structural complex of emergent life, while inviting an openness to hope, an attestation to the meaning of freedom.

### *III. b. The Body as Site of Mediation of Action and Cosmology*

The second reference I wish to take up with regard to the movement from action to cosmology is that of the human body. As the site of human action, the body is also the privileged place of our solidarity with the cosmos. Due to this double reference (to action and to the cosmos), the body becomes the locus of the mediation of action and cosmology. I shall develop my remarks by focusing attention on the phrase that the body is the "place" of action.

First, by place we do not simply mean where an individual happens to be physically but an environment of recurring schemes of relationships that ensure the set of conditions necessary for living. Biologically, we speak of those relationships which sustain the body as a living, unified organic life form. But beyond this, modern cosmology has given added depth and breadth to the scales of space and time which define the very conditions for our appearance on the scene of life and which are constitutive of the structure of freedom.

For example, at a purely factual level, we may note the contingencies and probabilities relative to the emergence of carbon-based chemical biosystems. We refer to the order of space and time in the magnitude of at least ten billion light years; on the scale of time, the evolutionary duration needed for the emergence of galaxies and stars necessary to produce the hydrogen and helium atoms needed, in turn, to develop carbon-based living systems on a planet which must sustain a minimum temperature over a minimum period of time so that life systems as we know them may emerge. On the scale of space there is required a certain mass of the universe such that certain chemical reactions may take place. The universe can be no smaller than one thousand billion galaxies, each galaxy requiring at least one billion stars.<sup>45</sup>

Yet, we must keep in mind that we do not identify these scales of space and time independent of their integration within an interpretation of the appearance of human beings. It is quite possible, based on these reflections, to speculate on how often, how many times or in how many different universes such a series of developments could or could have taken place. But here, we begin with the fact of the appearance of human life, and the scales of time and space that correspond to its appearance. In addition, the value of such an attention to human life is supported by the singular capacity of human beings to develop reflection such

---

<sup>45</sup>Ladrière, "Le principe anthropique," 18-19.

that among orders of known life systems and their behaviors, no other form of life has demonstrated such diversity in relation to an environment. In short, to follow Ladrière's own reflections in this context, evolution as a form of the recapitulation of lower order systems by higher order systems has led to the emergence of a life form, human beings, that constitute from the perspective of cosmology itself a singularly unique instance of genesis.<sup>46</sup>

Such an interpretation remains within a discourse proper to cosmology. It simply requires an attention to the act of reflection and intelligibility itself. Were such an interpretation to be judged unsound then we would be required to remain purely within the realm of an order of discourse determined by contingency and routines of probabilities which simply identify disparate facts. But as we saw earlier, cosmology as a discipline is a higher order viewpoint and asks about the self-ordering and self-organizing of the cosmos as cosmos. Here, what has come to be identified in general as the anthropic principle represents not a fact in the order of regional empirical disciplines, but a fact of the order of the intelligibility and direction of the universe as universe.<sup>47</sup>

To be sure, such an intelligibility does avow the privileged role of thinking beings. Cosmology recognizes a singularly unique fact<sup>48</sup> from which it is possible to account for initial conditions of the universe. From the side of human action, however, not only is such a cosmological interpretation respected in terms of the autonomy of its own discipline; moreover, the human body as the site of action remains less the site of what is passively suffered than the place of human experience as the locus of possibilities.

Our existence as corporeal beings plays a unique mediating role in our understanding of action and its form of time. For experience is of the order of an event. It is not simply what I suffer, but also what I intend with regard to my self and my life. The reference to event is at once the sign of the possibility of an initiative which by definition exceeds a structure governed by the laws of the processes of nature. Yet, to the extent that such an experience is possible, it is only due at the same time to the recognition that any action and its corresponding events is, by virtue of a solidarity with the cosmos, a solidarity which recognizes that in each one of us, we individually bear the testimony of ten billion light years of the recapitulation of life. I have remarked that the anthropic principle is an attempt by cosmology to account for an order of intelligibility. I would argue, moreover, that the foundation and validity of approach are found

---

<sup>46</sup>Ibid., 22. See also Jean Ladrière, "Le principe anthropique et la finalité," in *Finalité et intentionalité. Doctrine thomiste et perspectives modernes: Actes du colloque de Louvain-la-Neuve et Louvain, 21-23 mai 1990*, ed. J. Follon et J. McEvoy, Bibliothèque philosophique de Louvain, 35 [sic pour 36] Louvain-la-Neuve, Editions de l'Institut Supérieur de Philosophie (Paris: J. Vrin; Leuven: Peeters, 1992) 259-84.

<sup>47</sup>Ladrière, "Le principe anthropique," 20-22.

<sup>48</sup>Ladrière, "Le principe anthropique et la finalité," 283-84.

in the very nature of our question itself about evil and hope. For evil and hope are not purely formal questions.

These are moral questions. In seeking answers we can ask whether such exercises of deliberation are worthwhile. This is a matter for decision. Such a decision, we noted, is a matter of the knowledge of faith. Yet, faith desires to promote human progress. "We praise progress and denounce every manifestation of decline. But is the universe on our side, or are we just gamblers and, if we are gamblers, are we not perhaps fools, individually struggling for authenticity and collectively endeavoring to snatch progress from the ever mounting welter of decline?"<sup>49</sup> In the way we formulate the question we testify or not to hope.

I indicated at the beginning of my presentation that modern cosmology does not ask such questions. They belong to the realm of human action. Yet, in this context, is not the very raising and discussion of the question itself among us as theologians testimony to an exercise on behalf of intelligibility that sustains the questions animating modern cosmology while exposing their own boundaries?

Thus, if cosmology does not ask these questions, perhaps in its own way it continues to remain a testimony to a resource of meaning on behalf of the hope which sustains human action against evil. Yet, faith makes its own contribution. It testifies that such questions will only be successfully posed if they are asked out of the horizon of the generosity of life and not its limits.<sup>50</sup>

JAMES R. PAMBRUN  
*Saint Paul University*  
*Ottawa, Ontario, Canada*

---

<sup>49</sup>Lonergan, *Method in Theology*, 102.

<sup>50</sup>See, e.g., the interest group report entitled "Theology and the Natural Sciences: the Origin of Life in the Universe," in *CTSA Proceedings* 49 (1994) 213-14. What is fascinating is Prof. Cyril Ponnamparuma's insight into the generosity of life in the universe.