

CONCEIVING DIVINE ACTION IN A DYNAMIC UNIVERSE

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1 Introduction

In the Vatican Observatory (VO) and the Center for Theology and the Natural Sciences (CTNS) divine action program there has been significant progress in framing the question of divine action within the context of conclusions from the various natural sciences, as well as in modeling both God's creative action in nature and God's special action in history in ways coherent with the understanding of nature we have from the sciences and acceptable from the point of Christian theological teaching and tradition.¹ In this paper I shall synthesize the main features of the conception of divine action which has emerged in this focused interaction between theology and the natural sciences, and then refine it further in light of clarification or development of several other issues which, in my judgment, were not adequately emphasized, addressed or resolved during the program. In doing this, I shall also briefly comment on some issues featured in the program which I shall not incorporate in my portrait of divine action—either because I do not consider them central to my synthesis, or because I do not agree with the way they have been invoked in models of divine action.

The key distinction regarding divine action which emerged from the program and was employed extensively during it is that between God's universal creative action in nature and God's special action in history in favor of particular persons or groups of persons. The former has been described dominantly in terms of traditional *creatio ex nihilo* / *creatio continua* primary-causality models, and understood essentially as an ontological—not temporal—origination and dependence. Obviously, this does not rule out a temporal origin of created reality—a temporal origin, either real or metaphorical, would symbolize and even emphasize ontological contingency.² But it is not the primary content of the concept. The other side of this notion of creation is that the natural sciences describe the secondary causes, the regularities, relationships, processes and structures—the laws of nature—through which the universe and nature unfold in all their richness. God *continues* to act as creator in and through these causal channels, sustaining

¹Some researchers consider that God's special action also can occur in nature—that is, without any reference to God's relationship with persons or groups of persons. I do not think this is the case—I believe a compelling argument can be given to show that God's action in nature is creative. In fact, as we indicate at the end of this paper, it may be that all divine action is essential creative, including what we categorize as special. These issues will be treated more fully later on.

² Cf. Robert John Russell, "Finite Creation without a Beginning: The Doctrine of Creation in Relation to Big Bang and Quantum Cosmologies," in *QC*, 293-329; idem, "T=0: Is It Theological Significant?," in *Religion and Science: History, Method, Dialogue*, W. Mark Richardson and Wesley Wildman, eds. (New York and London: Routledge, 1996), 201-24.

them in their existence and their efficacy. In fact, the principal way in which God continues to act, and manifest God's self, is through the dynamisms of "the laws of nature," *not* outside them. Exactly what this comprises and implies requires further elaboration, analysis and interpretation. From one point of view, *modulo* careful qualifications concerning what God is responsible for and what God is not, this can include all that occurs in history—all that human beings as individuals and as communities accomplish. The VO/CTNS participants seem to be in agreement that the laws of nature investigated by the sciences require an ontological grounding which they themselves cannot provide, and that they are the channel of God's continuing creative action in the universe. As a group, however, they were not ready to accept that this includes the ambiguities and tragedies of human history.

In section 2 we shall examine with some care certain aspects of the *creatio ex nihilo*—primary causality model of creative divine action—especially the transcendental character of the "divine action" involved, its fundamental resistance to any conceptualization, and the protocols which must therefore be enforced in analogically describing it via concepts like "cause," "act," or "ground." I have provided this detailed summary, because, from a philosophical and theological point of view it is, in my opinion, *creatio ex nihilo* and the ideas closely connected with it that provide a fundamental basis for properly understanding God's action in the world—both God's universal, creative action, and God's special action. Even those approaches which distance themselves from *creatio ex nihilo* or from the closely related primary/secondary causal distinction generally adopt some of its essential features, such as the fundamental ontological dependence of reality upon God and the unique character of the divine causal role. Secondly, as I shall point out later, one of the important influences of our scientific knowledge of nature is to reinforce and nuance this articulation of divine action. In fact, as I summarize its important features, the impact of the natural sciences, though implicit, will be evident. And thirdly, in my judgment, *creatio ex nihilo*, the issues connected with it and the consequences flowing from it were not adequately engaged in the course of the VO/CTNS series. Such engagement—particularly from a philosophical point of view—should be on our agenda for the future.

In section 3 will go on to review some of the insights which have emerged regarding how "the laws of nature" are to be most helpfully and accurately conceived, how God's universal creative action is effected and manifested in and through them, and take a brief look at divine action under the metaphors of the influence of the whole on its parts and the action of top-level causes on lower-level processes and entities. These considerations will provide the background and the foundation for examining some of the central issues regarding God's special divine action in history.

That is the more problematic side of our basic categorization of divine action. Given the restrictions which our understanding of the natural sciences seem to impose on the influences of any purely immaterial causal agency, internal or external to the material world, how can we adequately understand and model such special divine action? Leaving aside those suggested solutions which are simply interpretational, psychological or metaphorical, there have been a number of suggestions which allow God to act in special ways, in

addition to God's universal creative action. Prominent among the possibilities which have been discussed and developed in the course of the VO/CTNS program have been:

1. God's special acts within the windows of opportunity provided by quantum indeterminacy;³
2. postulating that "the laws of nature" as they actually function in reality are much richer and deeper than what we have modeled in the natural and the human sciences, thus allowing for God's special acts without their violation;⁴
3. conceiving God's special acts as flowing from the "top-down" or "whole-part" causalities exercised by God toward creation;⁵
4. denying that the natural sciences enforce a determinism—even at the classical macroscopic level—that rules out God's special acts in history.⁶

Categories (2) to (4) point in roughly the same direction, and possibly can be fruitfully pursued together, once their differing points of departure and underlying metaphors are recognized. In accounting for God's perceived special acts within history, besides the issue of intervening in or violating the established "laws of nature," there is the theological requirement that God not be identified as simply another secondary cause, filling in gaps or directly functioning in ways that seem to be always accomplished by created causes or agents. Thus, there has been a strong inclination by all participants to link God's special action more closely with God's universal creative role. We shall return to this issue later.

But first we shall deal with several crucial issues whose resolution, along with how we conceive God's universal creative action and the laws of nature, strongly influences any conclusions we attempt to draw in this area. In section 4, we shall discuss the meaning and limits of determinism in nature, whether or not it holds, or can be shown to hold—and in what sense—and whether special divine action requires windows of indeterminacy in order to operate (the compatibilism/incompatibilism divide). And then finally in section 5, relying on the conclusions we have drawn along the way, we shall, taking our cue

³ See Robert John Russell, "Divine Action and Quantum Mechanics: A Fresh Assessment," in *QM*, 293-328, and references therein; see also Wesley J. Wildman, "The Divine Action Project, 1988-2003," *Theology and Science*, Vol. 2, No. 1 (2004): 31-75, and references therein.

⁴ See William R. Stoeger, S. J., "Contemporary Physics and the Ontological Status of the Laws of Nature," in *QC*, 209-34; idem, "The Mind-Brain Problem, the Laws of Nature and Constitutive Relationships," in *NP*, 129-46, and references therein; John Polkinghorne, "The Laws of Nature and the Laws of Physics," in *QC*, 437-48, and references therein.

⁵ Arthur R. Peacocke, "The Sound of Sheer Silence: How Does God Communicate with Humanity?," in *NP*, 215-42, and references therein.

⁶ William Alston, "Divine Action, Human Freedom, and the Laws of Nature," in *QC*, 185-207; Keith Ward, "God as a Principle of Cosmological Explanation," in *QC*, 247-62.

from Tom Tracy's ideas,⁷ venture a portrayal of special divine action as a manifestation or mode of God's universal creative action, properly conceived.

2 God as Creator—God's Relation to the World

The traditional Judeo-Christian-Islamic expression of God's relation to the world is in terms of creation—God as the Creator and Sustainer of all that is, freely endowing all that is not God with existence, order and dynamism—that is, “the laws of nature.” Or we can turn this around, and say that creation is the relation of all that is to the Creator.⁸ From God's side it is a self-communication, an act of efficient causality (but not limited to efficient causality), producing creatures (i.e. things whose being is not that of God's being). From our side it is the relation of ultimate dependence.⁹ This has almost always been articulated as *creatio ex nihilo*, creation from absolutely nothing—God producing or establishing reality without any prior raw material, energy, or laws of nature except, of course, God. As has been indicated often in the science-theology dialogue, this formulation is complemented by the idea of *creatio continua*, continuing creation, which stresses that the divine “act” of creation continues as long as anything that is not God exists. The basic content of *creatio ex nihilo* and *creatio continua* is the absolute dependence of all that is not God on God. God is the ontological origin of everything that exists—the universe, the world and all that they contain. This may or may not involve a chronological origin—“a first moment of creation”—but that is a secondary issue. There have been many different precisions, variations and modifications of this basic approach in the history of philosophy and philosophical theology. We shall not even attempt to discuss these. Instead we shall connect this fundamental model of creation with other key concepts, discuss how these concepts are to be qualified and interpreted in light of the impossibility of saying anything adequately descriptive of God and God's action, and briefly examine some of the problems with this approach and some of the alternatives. All this has been said many times before.¹⁰ Here, I am summarizing it very briefly, as an introduction to some important closely related points which are rarely made, and which help us interpret and apply these insights much more flexibly and insightfully. In particular, I want to suggest how this articulation

⁷ Thomas F. Tracy, “Creation, Providence, and Quantum Chance,” in *QM*, 238ff.

⁸ See Catherine Mowry LaCugna, *God for Us: The Trinity and Christian Life* (San Francisco: HarperSanFrancisco, 1993), 160; as Robert J. Russell, private communication, has said, “To be a creation is to be in relation to God as Creator and to be entirely constituted by that relation.”

⁹ LaCugna, *God for Us*, 60.

¹⁰ For substantial but brief summary treatments of this constellation of traditional ideas on creation, see Langdon Gilkey, “Creation, Being, and Nonbeing,” in *God and Creation: An Ecumenical Symposium*, David B. Burrell and Bernard McGinn, eds. (Notre Dame, Ind.: University of Notre Dame Press, 1990), 226-41; LaCugna, *God for Us*, 158-67; William R. Stoeger, S. J., “The Origin of the Universe in Science and Religion,” in *Cosmos, Bios, Theos: Scientists Reflect on Science, God, and the Origins of the Universe, Life and Homo Sapiens*, Henry Margenau and Roy A. Varghese, eds. (La Salle, Ill.: Open Court, 1992), 254-69.

of God's action can be usefully refined and modulated within the careful description and analyses of other related experiences and phenomena—from the natural sciences, from philosophy, from theology.

Creatio ex nihilo is intimately related to the well-known "primary-secondary cause" distinction and classification. According to this, God, who is the Creator, is the primary, first, or ultimate "cause" of everything, and as such is uncaused. In that sense, God's nature is "to be"—to exist, and God is the necessary, ultimate "being," pure act—on which all else depends, and from which all else flows. All other causes are secondary causes, and ultimately dependent on the primary cause. God as "the primary cause" is unlike any other cause. As "primary cause"—as Creator—God is effective, but super-effective in some ways, and markedly under-effective in others. God's creative action, as we have already indicated, does not need any pre-existing material to mold, or fashion. It ultimately effects, forms, sustains and coordinates all the laws of nature—the regularities, relationships and processes which embody the complexity and intricacy of nature on its many different levels of organization. But, in doing that, it endows them with their own independent characters and efficacies, leaving them free to operate within their proper contexts. God is the ultimate or foundational "cause," then, of order as well as of existence. But, at the same time, God as primary cause is hidden, is not isolatable, cannot be picked out as a recognizable "cause" completely distinct from other, scientifically accessible causes.

God as primary cause is distinct, though, from all secondary causes and entities, but it would be incorrect to say that God is "outside" them. Unlike any other cause, because God is transcendent (subject to no barriers or constraints), God is radically immanent (interior) to all that is—but in a highly differentiated way, according to the character of each process, relationship or object. God, then, is not an entity, like other entities—God is more like a verb, a continuing action in which everything else participates, but participates according to its own individuality. God's primary causality does not substitute for nor interfere with nor countermand the integrity and adequacy of the (secondary) causal structures of nature or of history—despite being their ultimate foundation and source.

Thus, the use of the word "cause" for God's creative action requires extensive qualification, or rather explanation. We are really using this word to describe a reality that it does not fit, and cannot even come close to describing adequately. But it is the best we have, as far as applicable concepts go. As we struggle to articulate divine "causation" more precisely and more accurately, we shall let a number of other helpful concepts and disclaimers interact with "primary causality" in order to temper its inadequacy. But we shall never completely succeed. Still it is important to continue—in order to recognize the transcendental character (the radically inconceivable character) of the ontological horizon or ground careful reflection on our experience reveals.

These reflections underscore the metaphorical and mythical character of our language about God, especially when we speak of God as an actor, or as a cause. In fact, it is precisely for this reason that the primary-secondary causal model was developed—to emphasize that when we speak of God as a cause, or as subject of an act, it is in a way which is unlike any other cause or act, transcending what we can describe or articulate. This negative theological

disclaimer must always be applied to whatever we end up saying about God's action. At the same time, this should not be taken to the extreme of holding that all analogical language about God is unhelpful or misleading—or that absolutely nothing at all can be asserted about God.

In this connection, I strongly suspect that the category of "relationship" is more fundamental than that of "act" or "cause." As I have argued elsewhere,¹¹ a more detailed and precise philosophy and theology of the different interconnected levels of relationality within creation, and of creation with God—within a dynamic Trinitarian framework—would improve our understanding of God's action in the world. This understanding would be based on a careful elaboration of how the interrelationships within nature, which are partially described by the sciences, are intimately linked with the creative relationship of God with the world, and therefore with the inner relationships of the Trinity which constitute God as God.

In characterizing *creatio ex nihilo* and the causality it represents, using somewhat traditional philosophical terms (the main point, of course, is not what terms we use, but what we are attempting to signify by them), we have done so referring to the context of our scientific knowledge of the world and the universe. In fact, the conclusions of the natural sciences, while not able to say anything directly about God or God's action, provide strong indirect support for these nuanced ways of describing God's action. It is clear, for instance, particularly from cosmology,¹² that cosmology and physics will never be able to describe or model the ultimate cause of the universe, nor of the laws of nature—that which effects the transition from absolute nothingness to existence and that which grounds the order of what exists. From that realization, it is a quick step to recognizing that whatever ultimately effects and maintains existence and order must be a cause unlike any other we know of. Furthermore, the findings of all the natural sciences strongly reinforce the formational and functional integrity¹³ and relative autonomy, of nature. This, in turn, helps us articulate more concretely the transcendent immanence of God's action. There is no need or room for God to act in nature as a created cause¹⁴—but God as Creator is present and active in each process and in the whole network of processes and relationships. Thus, we can also say, in a way we could not have before the advent of the natural sciences, that God's universal creative action, though unique, is also realized in a highly differentiated and evolving way throughout nature. This evolutionary,

¹¹ William R. Stoeger, S. J., "God and Time: The Action and Life of the Triune God in the World," *Theology Today* 55, No. 3 (October 1998): 365-88.

¹² See, for instance, C. J. Isham, "Creation of the Universe as a Quantum Process," in *PPT*, 375-408; idem, "Quantum Theories of the Creation of the Universe," in *QC*, 49-89; William R. Stoeger, S. J., "Contemporary Cosmology and Its Implications for the Science-Religion Dialogue," in *PPT*, 219-47; and Russell, "Finite Creation without a Beginning."

¹³ See Howard J. Van Till, *The Fourth Day: What the Bible and the Heavens Are Telling Us About Creation* (Grand Rapids, Mich.: Eerdmans, 1986).

¹⁴ No participant in the divine action project has intentionally treated God as a created cause. However, my concern is that we may not have completely avoided doing so in our modeling and discussions of special divine action.

emergent and unfinished character of creation revealed by the sciences serves to emphasize the continuing character of God's action through the regularities, processes and relationships God sustains. From a scientific perspective we can point also to the central importance of relationality in the hierarchical structuring of physical and biological reality—this, too, is consonant and supportive of what we know of God and of God's activity from theology.¹⁵ Finally, linked with evolutionary character of nature, we also notice the transience of entities and groups of entities within creation, serving the continuation and evolution of the whole. This, too, is consonant with what we as Christians have come to understand about God's presence and action within creation.¹⁶ Along with the properties of divine creative action which these key characteristics of nature, as the sciences reveal them, reflect, modify and reinforce is that it cannot be simply an efficient cause. It must also, at the same time, endow creation with potentiality, form and purpose. This is manifested particularly evident in the highly differentiated relationality and evolutionary character of reality.¹⁷

Returning to *creatio ex nihilo* itself, some of the other important things to point out about this model of God's universal creative action follow from our discussion so far. These are not characteristics of all versions of the model. I am accentuating them, because in my opinion they are characteristics of the strongest and least inadequate version. First, God's creative act is not necessary—it is not an automatic "emanation" from the divine Creator, as Platonists and Neo-Platonists would have it. It is, rather, a free decision or choice of God to create. Secondly, the action is in a sense one action—with many manifestations, which are all eternally present to God. From the creature's perspective it is obviously continuing in time—perduring in time. This can be at least intuitively rendered somewhat intelligible by emphasizing once again that God is not an entity, but rather "an activity." As such, from the point of view of "the divine activity," there is no other activity or act, nor is there any intrinsic limit—beginning or ending—or other type of restriction to this activity,¹⁸ and there is thus no time, in that sense. There are, however, relationships—relationships within God, God's self, (Trinitarian relationships, according to the Christian view) and relationships between God and the world. From the point of view of these relationships, we might say that there is a type of time—we call it "eternity"—the ultimate connectedness or "togetherness of

¹⁵ For a further discussion of these characteristics, see William R. Stoeger, S. J., "Cosmology and a Theology of Creation," in *Interdisciplinary Perspectives on Cosmology and Biological Evolution*, Hilary D. Regan and Mark Worthing, eds. (Adelaide, Australia: Australian Theological Forum, 2002), 128-45.

¹⁶ This is particularly clear if we consider God's creative action continuing and being completed by the new creation effected by Christ in His Life, Death, Resurrection and Sending of the Spirit and our participation in that.

¹⁷ See Paul Davies, "Teleology without Teleology: Purpose through Emergent Complexity," in *EMB*, 151-62; and William R. Stoeger, S. J., "The Immanent Directionality of the Evolutionary Process, and Its Relationship to Teleology," in *EMB*, 163-90.

¹⁸ See Joseph A. Bracken, *The Divine Matrix: Creativity as Link between East and West* (Maryknoll, N.Y.: Orbis Books, 1995), 11-37, 128-40.

the temporal modes" within creation itself.¹⁹ This "eternity" finds its foundation and condition of possibility in the enhanced, ultimate "togetherness" of activity and relationship within the Creator—the Creator's "eternity." So far, we have reflected on what Bernard McGinn refers to as the four basic constituents of the idea of creation: dependence, distinction, decision and duration.²⁰ These characteristics are intimately inter-related, which is obvious upon careful reflection. We shall not elaborate these relationships here, beyond what we have already implied.

But now there are some further nuances required in understanding these features of creation. Continuing with our enumeration, thirdly, according to almost all proponents of this approach, God's act of creation does not change or perfect God in God's essence. God would still be God without having created anything outside of God, and God would not be any less loving, good or complete by not having done so. Creation manifests all these qualities of God, but does not constitute them for God. Fourthly, though God is completely distinct from creation, and creation is utterly dependent upon God, God is deeply immanent within creation—closer and more intimately present to creation than creation is to itself. This is the transcendent immanence of the Creator—as we have briefly said above, the transcendence of God enables God's immanence. God, though radically distinct from Creation is profoundly present and active within it—in highly differentiated ways. And, though present and active, also, in a very definite sense, hidden and vulnerable within it, too.

Fifthly and finally, God's creative action involves God's practical knowledge of creation in a very peculiar and transcendent way.²¹ Essentially, God's knowledge as creator—though working through secondary causes—is like that of the artisan, articulated or expressed in the act of creation itself and is fundamentally of particulars—individuals—rather than of abstract universals, though, at the same time, God's knowledge as Creator includes such knowledge. This, along with God's free choice in creation, makes God's creative action personal—present, oriented, and active within each particular with reverence for what it is in itself. How then does God know uncreated, unactualized possibilities? Only as what could have existed but does not, since God in God's eternity is present to all that existed, exists or will exist.²² It is difficult to appreciate how both of these types of expression of particular divine creative knowledge are possible in light of the fact that God enables the autonomy and integrity of the laws of nature—seeming to delegate or parcel out divine creative decisions and power to blind, insensitive processes. But that would be to forget God as Creator continues to be profoundly immanent in and ontologically supportive of all those processes and secondary causes *all the time*. As Creator, "God knows what God is doing," not propositionally or

¹⁹ Robert Cummings Neville, *Eternity and Time's Flow* (Albany, N.Y.: SUNY Press, 1993), 268; see also Stoeger, "God and Time."

²⁰ Bernard McGinn, "Do Christian Platonists Really Believe in Creation?," in *God and Creation*, Burrell and McGinn, eds., 208-9.

²¹ See David B. Burrell, *Knowing the Unknowable God: Ibn-Sina, Maimonides, Aquinas* (Notre Dame, Ind.: University of Notre Dame Press, 1986), 71-91.

²² *Ibid.*, 99-104.

speculatively but practically and intimately, in endowing each individual object and entity with participation in God's being, even though this is achieved, as God intends, "through the integrity of natural causes."²³

The drawbacks and inadequacies of this type of traditional approach to God's creative action are well known, and have been discussed frequently in the literature. As John O'Donnell helpfully summarizes, this concept of God—God as absolute, immutable, without potentiality, outside of time, and unaffected by what God creates—is considered by many to be both "metaphysically incoherent" and religiously objectionable.²⁴ It seems to be "metaphysically incoherent," because it is difficult to reconcile this portrayal of God's transcendent character with what it also asserts regarding God's immanence and knowledge. It seems that a God who really knows each object and is immanent in each, must, at least in some way, contain temporality and must be affected by that knowledge, especially if creation is also relatively autonomous and free to be itself, as this approach also emphasizes. It is religiously objectionable, because it seems to rule out any incorporation of genuine love and vulnerability, and thus seems to contradict what is proclaimed by Christian, Islamic and Jewish faith. It seems to rule out any self-communication of God, which is essential to what the theological concept of God implies.²⁵

Langdon Gilkey²⁶ emphasizes the same failures, but goes on to analyze perceptively the root of the problem. As many, many theologians and philosophers have pointed out, and as we have already emphasized, God simply cannot be described or conceptualized—or objectified as other existents or beings are. God is beyond—transcends—all categories and language. When we use a concept to describe God we can do so only "symbolically" or "analogically." Essentially, God is intrinsic mystery, inexhaustible richness which is constantly being revealed but whose depths can never be adequately plumbed nor reached. What we have often done, however, is mistakenly to translate this transcendence and intrinsic mystery into "the absoluteness of God's being." The finitude of being we experience and understand has been naively extrapolated—"transcended"—into an absolute degree of the very sort of being we know and experience. Thus, as Gilkey says, "God's nature becomes defined by its unconditional and absolute character rather than by its mystery, and the dialectical nature of the relation of that mystery to the being that is God is lost—as the continual relatedness of God to finite being is also sacrificed."²⁷ Thus, we end up deluding ourselves into thinking we have adequately described God by this move, but in so doing we have dismissed the radically mysterious character of the divine reality, and "overaffirmed" the

²³ Ibid., 98-9.

²⁴ John J. O'Donnell, S. J., *Trinity and Temporality: The Christian Doctrine of God in the Light of Process Theology and the Theology of Hope* (Oxford: Oxford University Press, 1983), 17-21.

²⁵ Robert W. Jenson, *Unbaptized God: The Basic Flaw in Ecumenical Theology* (Minneapolis: Fortress Press, 1992), 138-9.

²⁶ Gilkey, "Creation, Being, and Nonbeing," 231-6.

²⁷ Ibid., 232.

being of God in terms of finite being.²⁸ Instead, we need to preserve the intrinsic mystery of God as fundamental, and insure that any affirmation of God's being or God's relationality is dialectically couched. These must be dialectically expressed simply because any words or concepts are inadequate to the mystery of God's being. Thus, in agreement with Gilkey, we are not called to reject the constellation of intricately inter-related metaphysical concepts and analyses which constitute the richer formulations of traditional *creatio ex nihilo* theology of creation. Rather, we are invited to radically revise it, or rather situate it dialectically as one well-honed but imperfect articulation of an important aspect of God's being and activity within the full, paradoxical, rich and incomprehensible mystery that our experiences of transcendence and divine revelation disclose.

Theologians and theologically oriented philosophers have done this in a variety of ways. Gilkey himself, for instance,²⁹ takes the basic traditional insights and re-configures them in a dialectical divine polarity of being and nonbeing. Bracken³⁰ transforms the basic traditional insights in terms of a metaphysically enriched Whiteheadian-like Creativity, a divine activity or process and not an entity, of which God is the primordial exemplar and in which all that exists participates. Others, like Karl Rahner,³¹ Catherine LaCugna,³² Colin Gunton,³³ and Nicholas Lash,³⁴ do something similar but more radically inter-relational by emphasizing the Trinitarian character of God, and of God's relationship to all that is not God.³⁵ Jenson³⁶ links the full realization of God as Trinity with Incarnation and all that flows from it in time.

Before concluding our reflections on God's relationship as Creator with the world in light of traditional and contemporary attempts to portray it, I wish to offer two further avenues of reflection and a final suggestion. The reflections return us to the fundamental issue of the radical mystery that God is, and to our complete inability to conceptualize God or God's activity. The first has to do with the realization that, despite this radical mystery and transcendence of God, we *do* have manifestations—revelations, self-communications—of God in persons and in experiences addressed to us which we can appropriate. God is disclosed to us in creation. And, as we have indicated above, the characteristics of creation manifested to us by the natural

²⁸ Ibid., 234, 236.

²⁹ Ibid., 236-40.

³⁰ Bracken, *The Divine Matrix*, 128-40.

³¹ Karl Rahner, *The Trinity* (New York: Herder and Herder, 1970), 120; idem, *Foundations of Christian Faith: An Introduction to the Idea of Christianity* (New York: The Seabury Press, 1978), see esp. 133-7, 178-203.

³² LaCugna, *God for Us*, 158-66.

³³ Colin E. Gunton, *The One, the Three and the Many: God, Creation and the Culture of Modernity* (Cambridge: Cambridge University Press, 1993), 248.

³⁴ Nicholas Lash, *Believing Three Ways in One God: A Reading of the Apostles' Creed* (Notre Dame, Ind.: University of Notre Dame Press, 1993), 136.

³⁵ Bracken also attempts to bring in the Trinitarian dimension in an essential way in his thinking, linking it with his notion of Creativity.

³⁶ Jenson, *Unbaptized God*, 138-45.

sciences are in harmony with, and even indirectly support, many of the fundamental qualities of God's creative action. Thus, in conceptualizing God and God's action, though no portrayal is adequate and the reality is far beyond all portrayals, we have some basis for determining the suitability of articulations about God and God's action. *Some portrayals of God and God's relationship to the world are much less inadequate and incorrect than others.*

The second reflection is simply that, as many have indicated, there are fundamental aspects of reality which we cannot conceptualize—which are transcendental and mysterious precisely because they are so fundamental, so essential, so rich, so pervasive that they cannot be defined or adequately described. Essentially, these are the characteristics of reality which cannot be isolated and studied separately from anything else, the intrinsic dynamism of reality, its existence, and the source of its order, all of which are deeply interconnected. We can point to them, but we cannot describe them or model their origin. And then there are the horizons within which we find and know all that we know, and within which we make choices and decisions, as well as what we can only refer to as "the conditions of possibility" for what we experience as existing, and for our knowledge of what exists. These are transcendentals, and defy any adequate categorical treatment.³⁷ And yet they are essential to an understanding of experience and reality as we know it. These are intimately connected with the mystery that we often refer to as "God," and with God's universal creative and sustaining grounding of all that is.

And now to my suggestion! As we have already stressed, none of our conceptual modeling comes anywhere near an adequate description of God the Creator, nor therefore of God's relationship to the world. We do the best we can with the concepts we have available to provide an impressionistic portrait of God and of God's creative action which avoids the more obvious difficulties. For example, we say that somehow God the Creator is the ground or basis of the existence and dynamism of all that is, but at the same time God is unlike any other cause, is not an entity like other entities, but rather more of an all-pervasive activity or process in which all else participates, and, though present everywhere cannot be isolated as either a separate cause or force. We are using these concepts and images like an impressionistic artist uses colors, juxtaposing and interrelating them in unusual and provocative ways in order to disclose a profound reality and convey a transcendent experience which is beyond what any carefully precise or fully logical use of language is capable. Our portrait is not by any means adequate either, but it possesses an openness and expresses a radical mystery which would have been missed, or at least flattened, by any description with clear and precise conceptual lines. Allowing a riot of images and concepts to modify and qualify one another in this way—with the help of philosophical and theological analysis—is probably the only way of optimizing our characterization of God and of God's action. Reliance on a single conceptual framework will never yield the nuances and subtleties a careful opened-ended collage of images and concepts is capable of. There

³⁷ See, for instance, James J. Bacik, *Apologetics and the Eclipse of Mystery: Mystagogy according to Karl Rahner* (Notre Dame, Ind.: University of Notre Dame Press, 1980), 166.

seem to be strong indications that the basic gist of *creatio ex nihilo* along with primary/secondary causality considerations is fundamental to any characterization of God's creative action. But, at the same time, the strongly relational and dynamic insights of both process and Trinitarian frameworks are essential.

3 The Laws of Nature and Top-Down Action

In the introduction to this paper we tagged six general approaches to God's special action which have been proposed in the VO/CTNS divine action program:

1. appealing to God's direct action within the indeterminacies offered by quantum theory (according to the most prominent interpretation of it—the Copenhagen interpretation);
2. considering that the laws of nature as they actually function in reality significantly transcend what we have been able to model;
3. conceiving special divine action as originating from the "top-down" or "whole-part" influence or relationship of God towards all that is not God;
4. opening nature at higher levels of process and complexity to God's intentional active information input (Polkinghorne);
5. employing the somewhat similar but less well-defined process idea of God presenting new possibilities to nature and inviting it to respond—eliciting but not determining novelty (Barbour, Birch, and Haught);
6. showing simply that there is no determinism which rules out God's special acts.

I shall not directly evaluate these six proposals. Instead I shall focus on several core issues which are essential to any such evaluation, and which have not been fully resolved.

In this paper I shall not discuss category (1), which has been dealt with in detail by many other contributors to this volume. There has been and is considerable controversy and disagreement concerning how these proposals are to be understood. The detailed critical review by Wildman offers a specific attempt at clarifying how they should be understood.³⁸

The most serious issue in all these approaches really is how a completely immaterial "cause" or "entity" can act to influence a material configuration or entity in a way which is not that of a "primary cause." Thus, for example, there is no real problem in allowing for free human activity—barring a rigid physical determinism—since that involves an embodied agent, and important restrictions such as the conservation of energy would still be in force. The challenge is to determine whether or not and how, and to model how, the divine presence can act directly in nature and in human situations without "violating" the laws of nature. Such violations are very problematic in view of the infrequency and lack of substantiation of such patterns of intervention, and

³⁸ See Wildman, "The Divine Action Project."

of issues relating to the problem of evil. Even of more concern, they threaten to cast God's role in the world into that of another secondary cause. One way around these constraints and problems is to relativize the determinisms seemingly demanded by the natural sciences by broadening our conceptions of "the laws of nature, such as in category (2) above. Strictly speaking, even leaving to one side the indeterminacies at the quantum level, it is clear, as Thomas Tracy emphasizes, that "the natural sciences do not require (on methodological grounds) or establish (on evidential grounds) an exceptionless causal determinism, though neither do they rule out such a metaphysical interpretation."³⁹

What are "the laws of nature"? As I have discussed elsewhere,⁴⁰ "the laws of nature" are the regularities, processes, structures and relationships which we find in reality. There are really two meanings we can attach to this phrase. They can refer to the regularities, processes, structures and relationships in nature as we imperfectly and provisionally describe them and understand them—"our laws of nature." Or they can refer to all the regularities, processes, structures and relationships as they actually function within reality, whether or not we recognize them or understand them. Obviously, "our laws of nature" are much more limited and uncertain than the full range of "the laws" in themselves, and only describe what occurs. They do not prescribe or enforce behavior. This distinction⁴¹ is very important, because, not only are there regularities, processes and relationships which the sciences have not yet discovered nor adequately modeled, there are also such processes and relationships which are in principle beyond the competencies of the natural sciences to investigate and to model. These would include those which reflect radically personal, metaphysical and theological (ultimate, transcendent and perceived revelatory), special and particular aspects of reality. These have been referred to by Albert Borgmann as "the deictic," those features of our experience which can be pointed out but not subsumed under general patterns and laws, but which endow our lives with meaning, value and orientation.⁴²

Thus, what we may consider to be "violations" of "our laws of nature," might not be when understood in the light of the full range of the relationships and processes within reality as they actually function—particularly the way in which certain "higher" regularities and relationships having to do with the personal, the social, and the transcendent may in some cases override, modify, or subsume the laws of nature we model in physics, chemistry and biology. It seems very clear, from the point of view of the contemporary natural sciences

³⁹ Tracy, "Creation, Providence, Quantum Chance," 237.

⁴⁰ Stoeger, "Contemporary Physics and the Ontological Status of the Laws of Nature"; Polkinghorne, "The Laws of Nature and the Laws of Physics"; William R. Stoeger, S.J., "Science, the Laws of Nature, and Divine Action," in *Interdisciplinary Perspectives on Cosmology and Biological Evolution*, Regan and Worthing, eds., 117-27.

⁴¹ Recently, some years after first insisting on this fundamental distinction, I found that Mario Bunge had already pointed it out in similar terms in his book *Causality and Modern Science*, 3rd rev. ed. (New York: Dover Publications, Inc., 1979), 249ff.

⁴² Albert Borgmann, *Technology and the Character of Contemporary Life* (Chicago: University of Chicago Press, 1984).

and from our philosophical and theological reflections on them, that God acts primarily through the laws of nature as they actually function, including those which constitute evolutionary processes and including as well those which pertain to personal relationships and our transcendent relationship to God as our ground of existence and order. God's creation of human beings, or of any particular species of organism, for instance, has been effected through the processes of physics, chemistry, and biology—according to the regularities and processes which comprise evolution—and not apart from those. When it comes to God's special action, however, it is helpful to recognize that it is always framed in virtue of God's personal relationship to individuals or to groups of individuals open to God. Thus, it seems that the "higher laws of nature" which pertain to these relationships are always essential for properly understanding such divine action in history.⁴³

Thus, as Keith Ward emphasizes in a way which, I believe, reflects the thinking of most of the VO/CTNS participants,

The laws of the physical universe should not be set in opposition to God, as inviolable general rules which God, as an external power, would have to violate in order to act. The laws give the structure within which the purposes of God are brought to realization; and at every point there is the possibility of a creatively free initiative or response from creatures and from God. The existence of a general rational structure in nature in no way inhibits the possibility of discontinuous emergent events which disclose the underlying character of the divine presence and prefigure the consummation of value which is the goal of creation. It is better to construe miracles as such transformations of the physical to disclose its spiritual foundation and goal than to think of them as violations of inflexible and purposeless laws of nature.⁴⁴

It is certainly true that these "creatively free initiatives or responses" from creatures and from God are constrained by the laws of nature in definite ways. In fact they are expressed through "the laws of nature." But, at the same time, Nature is open to such initiatives at all levels—through indeterminacies and openness to chance at lower levels, through natural selection, symbiotic relationships and amplification of feedback mechanisms at intermediate levels of complexity, and through goal directed behavior, personal decisions and relationships among conscious beings at higher levels. It is vital in this regard to recognize and to describe in greater detail those relevant phenomena which transcend the present competencies of the natural sciences—for example, mental reasoning and complex human decision-making processes and the role of inter-personal and social relationships in living and working. It is also

⁴³ As I have indicated in the introduction, I hold that God's special action, insofar as we can distinguish it from God's universal creative action, is initiated in virtue of God's relationships with persons or groups of persons (it may involve natural processes or events, certainly, but in order to express or enhance the personal relationships which are their foci). Otherwise, God's universal creative action—in the highly differentiated forms it assumes via *creatio continua*—is sufficient. In fact, it may be, as we shall see later, that all special divine action can be subsumed under divine creative action properly understood. Does this eliminate "special providence" from natural processes? It depends on how you define that term.

⁴⁴ Keith Ward, "God as a Principle of Cosmological Explanation," in *QC*, 260.

crucial to understand more fully how the different levels of the laws of nature are connected—principally but not exclusively through different types and levels of reducibility and emergence. Finally, the interplay of internal and external constitutive relationships must always be considered,⁴⁵ particularly in cases in which semantic or pragmatic—as distinct from purely syntactic—information is being generated and is playing a key role.

Turning to the operation of top-down—and whole part—causality, we really need to articulate more clearly how such concepts or images express the special divine acts of salvation history in ways which mesh with and qualify the apparent restrictions imposed by the findings of the natural sciences, and provide enough dynamism and novelty to constitute these special acts themselves. These top-down and whole-part metaphors focus our considerations on important “external” or transcendently immanent relationships which have been there all along and which are either presumed by or hidden from the natural sciences. They only manifest themselves locally when the lower-level entities or parts open themselves to the potentialities contained therein. It is likely, furthermore, that such a characterization is simply an alternative model of what is being expressed when we invoke “laws of nature” beyond those which are within the competency of the sciences to describe. Though some suggestions along these lines point towards a strong panentheism, such as Chris Clarke’s notion of “entrainment,”⁴⁶ they serve as clear examples of such all-embracing causality. He observes:

My experience of the divine is of a guidance that is immanent, in being part of the concrete flow of events around me, and transcendent in the sense of not being contained within any given contextual framework, of being always greater than my current horizons. It thus makes sense for me to think of the divine as analogous to an ideal outermost system, beyond any imaginable context and of divine action as being top-down action of will through entrainment that coordinates and informs all the individual acts of will that it contains.

This is a model of a very strong type of connection between God’s universal creative action and God’s particular “actions” in history, in which all creation is essentially found “within” God, with its dynamisms ultimately derived from and coordinated by God. But how can this be understood in light of the natural sciences? Obviously, all—or at least a large part—of the coordination and informing of individual acts by an immanent God must be done by the laws of nature as they actually function, those we have modeled and more or less understood through the sciences, and those we have not, or cannot, understand through what they reveal. And just as obviously, this top-down causation must be qualified by what we have already pointed out about God’s universal creative action in section 2, and by our pervasive experience of the formational and functional integrity⁴⁷ and the relative autonomy of nature.

⁴⁵ William R. Stoeger, S. J., “The Mind-Brain Problem, the Laws of Nature, and Constitutive Relationships,” in *NP*, 129-46.

⁴⁶ Chris Clarke, “The Histories Interpretation of Quantum Theory and the Problem of Human/Divine Action,” in *QM*, 176-8.

⁴⁷ Van Till, *The Fourth Day*.

4 *The Specter of Determinism*

A central issue with regard to special divine action is determinism: Do God's special acts in history require indeterminism in the laws of nature as they really function? Or can special divine action, instead, occur even though the laws of nature at a given level are deterministic? An affirmative answer to this latter question characterizes what has come to be known as compatibilism—God's special acts are compatible with determinism. Requiring windows of indeterminacy in nature for God's acts, in contrast, is the incompatibilist stance. One strong motivation for assuming the incompatibilist position is to achieve "traction" on the issue of divine action relative to testable conclusions of the natural sciences.⁴⁸ That is, the incompatibilist stance, according to its proponents, enables one to rule out types of special divine action on the basis of our scientific understanding of the laws of nature—God may only act in a special, direct way in the "causal gaps" opened by indeterminacies. Otherwise, God's special action would conflict with the causal processes within nature. Detailed discussion of these and related issues are found in Wesley Wildman's⁴⁹ and Philip Clayton's⁵⁰ contributions to this volume.

Here we shall confine our discussion to the meaning and extent of determinism as it applies to the laws of nature as they actually function, and to a consideration of whether God's special action requires indeterminism. How strongly do the natural sciences compel us to push special divine acts into the windows of indeterminacy in the natural order? As we shall see, it is very difficult to justify a strict determinism in the fabric of nature, even setting aside quantum indeterminacy. However, at the same time, whether or not freedom from strict determinism is required for special divine action depends very much on how such action is conceived or modeled. If it is modeled to mimic the secondary causes with which we are familiar, then it certainly does require freedom from strict determinism. But, if, on the other hand, it is conceived in some way as an influence which works in and through such secondary causes, as a mode of God's universal creative action, for instance, then it does not. This particular characterization of special divine action is the focus of section 5, immediately below.

But what is determinism? As we have implied above, it is basically a mathematical concept. A system is deterministic if its state or configuration at any time automatically leads to (*determines*) a single definite state or configuration at some later time. That is, once we set the state of the system at a certain time, the system will inevitably end up in a definite state at any specified later time—if there is no other outside influence impinging upon it. Or if we know the state of system with exact precision at one time, we can, if we know the equations governing the system, tell what the precise state of the system will be at any later time (this, of course, cannot be done in a chaotic system, which is deterministic, simply because it exhibits extreme sensitivity

⁴⁸ Philip Clayton, "Toward a Theory of Divine Action That Has Traction," in this volume, and references therein.

⁴⁹ Wildman, "The Divine Action Project," in this volume.

⁵⁰ Philip Clayton, "Toward a Theory of Divine Action."

to initial conditions and we cannot know the initial state of the system with the necessary precision.⁵¹

Now, what is clear from this characterization of determinism is that it is system-specific. That is, we can only apply the term to a definite well defined system, which must be isolated from other systems. If it is not isolated, then we must examine the smallest larger completely isolated system of which the original system is a part—to see if that system is deterministic. Furthermore, determinism is in most cases level-specific, that is, finding out that systems on one level of organization are deterministic (at the level of molecules, say) does not imply either that the less complex systems on more fundamental levels which constitute the system on the given level, or the more complex systems on higher levels, which are constituted by the systems on the given level, are deterministic. This will only be true if causal reducibility⁵² holds in the latter case, and if the more fundamental lower-level system is deterministic in its own right (it may not be!) in the former case. Furthermore, as one can already see, it is very, very difficult—if not impossible—to discern in practice whether a given real system is deterministic or not. Idealized cases are relatively easy. But it is extremely difficult to test whether or not a given real system of interest is isolated, or to specify the larger system it is part of which is isolated—so that its deterministic character can be checked.

When we consider the observable universe itself, as it really is and not just how it has been theoretically modeled in a simple way, discerning whether or not it is deterministic is fraught with difficulty. Consider the case of most interest, the Earth and all its subsystems. First and most fundamentally, there is the quantum substrate, which, according to the most accepted interpretation, induces an irreducibly indeterministic element into the macroscopic world. But, leaving this to one side, we are also aware that there are innumerable levels of complexity which are intertwined. If we look at any single-level subsystem it is virtually impossible to isolate a system which we could then study to find out whether or not it is deterministic. An idealized *model* of it might be—such as a deterministic chaotic model—but that does not mean that *the actual system* is. Furthermore, how would we make such a conclusion, that the determinism of the model is also a characteristic of the real system? Secondly, determinism on any level does not, as we have already seen, trickle up or down levels—unless it is already present on the lower level, and unless causal reductionism holds. The emergent properties of higher levels (see section 3 above) may, and probably often do, introduce new irreducible causal elements into the equation, most notably the self-conscious intentionality of human beings.

⁵¹ See, for instance, Robert John Russell, "Introduction," in *CC*, 1-31, and references therein.

⁵² Nancey Murphy, "Supervenience and the Downward Efficacy of the Mental: A Nonreductive Physicalist Account of Human Action," in *NP*, 146-164; see also William R. Stoeger, "Reductionism and Emergence: Implications for the Interaction of Theology with the Natural Sciences," in *Evolution and Emergence: Systems, Organisms, Persons*, Nancey Murphy and William R. Stoeger, eds. (Oxford: Oxford University Press, 2007), 229-247.

Our conclusion from this basic discussion of determinism is simply that it cannot be applied to multi-level organization of nature as a whole, even though it may in limited cases be applied to one or other sub-system on a given level. Since it certainly does not characterize the organization nor the dynamics on most levels, including the quantum level, and since causal reducibility can be compelling shown not to hold,⁵³ strict determinism is not a characteristic of nature as a whole. This is further supported by careful analysis of the different types of emergent systems and processes which develop as the universe evolves. These involve causal influences which are radically new, often depending on feedback from the macroscopic to the microscopic domain and, in more advanced cases, generation and transmission of semantic/pragmatic information (as in DNA/protein systems), and irreducible to causal influences at lower levels. At even higher levels of organization we have the eruption of intentional, goal-directed action and behavior, some of it freely initiated by conscious agents, who can anticipate the consequences of their actions. Although such choices are influenced and conditioned by environment and history, they are not determined by them.

Of course, as we have already pointed out earlier, the natural sciences themselves as such do not in any way require or establish "an exceptionless causal determinism," either methodologically or evidentially.⁵⁴ However, at the same time, we want to avoid modeling or considering God's actions as simply extraordinary exceptions to the secondary causal fabric that characterizes nature—as another secondary cause hidden in the interstices of nature which unpredictably manifests itself in events which fall outside the usual patterns of natural regularities and processes. One way of doing this, as we have already seen, is to recognize that there are influential relationships which transcend what the natural sciences are able to investigate and understand on their own terms—which we have identified as the personal, the social, the transcendent, the spiritual, and the particular as particular. These also belong to "the laws of nature" as they actually function, even though they cannot be adequately investigated or modeled by the natural sciences. And these influential relationships almost always transcend—rise above—the constraints which seem to enforce determinism on a given level, though they are often conditioned by them.

Because of these considerations, there is a deep ambiguity in the issue of compatibilism vs. incompatibilism. If one's reference is to a thoroughgoing strict determinism which pervades all levels of organization and relationship, including those which transcend the natural sciences, then, of course, it seems clear that direct special divine action would be impossible, unless compatibilism holds. (We should recognize at this point that very few serious scholars any longer espouse such an all-embracing determinism.) But, in any case, it then seems very difficult, if not impossible, to understand such direct

⁵³ See, for instance, Steven Rose, *Lifelines* (Oxford: Oxford University Press, 1998), esp. chap. 4; Martinez J. Hewlett, "True to Life? Biological Models of Origin and Evolution," in *Evolution and Emergence: Systems, Organisms, Persons*, Nancey Murphy and William R. Stoeger, eds. (Oxford: Oxford University Press, 2007), 158-172; Murphy, "Supervenience and the Downward Efficacy of the Mental."

⁵⁴ Tracy, "Creation, Providence, and Quantum Chance," 237.

special divine action in a coherent fashion. What specific feature of reality and of God's relationship to it would render compatibilism a coherent and acceptable position? Thus, it seems correct to venture that special divine action, however it is conceived, does require "causal" openness to God at some level—an active relationship to the divine—which cannot be reduced simply to a naive grounding of the secondary causes of the material world.⁵⁵ This does not mean, however, that such divine influence competes with or countermands natural processes or relationships, though it may subsume them, marshal them in a definite way, or subsume them, in virtue of other higher relationships or processes—as the biological often does to the physical and the chemical, and personal to the biological and physical. In fact, as we have already emphasized, God's relationship with nature and with us is articulated precisely through the laws of nature—those we understand and have modeled, and those we have not. The principal difficulty arises when we terminate or absolutize "the laws of nature" according to what we presently understand and have modeled, without taking into consideration deeper or ultimate levels of relationship which escape adequate generalization in terms of physical, chemical or biological regularities.

If, on the other hand, our reference is to a determinism on one or other level, or even on several levels, apropos of our observations about physical determinism, then, of course, we may still be compatibilist—since that limited determinism is still compatible with divine action which engages conscious agents at levels which transcend those at which determinism is effective. This distinction, it seems to me, enables us to avoid some of the confusions which sometimes afflict these discussions. Another way of putting this is to say that the determinacies of, say, macroscopic physics are relative and not absolute—that is, relative to the levels at which the laws of physics and chemistry dominate, but not ruling out the operation of causal relationships, such as the mental and the personal, which transcend those described by physics and chemistry.⁵⁶

Ultimately, as I have recently pointed out,⁵⁷ determinism is really a "red herring" in this particular discussion. What really seems to distinguish the two schools of thought is whether or not direct special divine action involves God's

⁵⁵ Here I am *not* attempting to argue definitively that special divine action requires indeterminism at whatever level it operates. What I am discussing is the meaning and the limited reach of determinism, which apparently strongly restricts the application of the usual compatibilist/incompatibilist distinction. This seems to indicate, but does not prove, that there is indeterminism at many levels within nature. Furthermore, this does not demonstrate one way or the other whether such indeterminism is necessary for God's special action—just that the issue itself may be less relevant than we first believed.

⁵⁶ Another way of conceiving this occurring is by distinguishing between models and the phenomena modeled: While the models we use may themselves be deterministic, there may be other important aspects of the realities being modeled which escape the determinism of the model. Obviously, it would be very important to lay out definite evidence of such transcendence of lower-level determinisms.

⁵⁷ William R. Stoeger, S. J., "The Divine Action Project: Reflections on the Compatibilism/Incompatibilism Divide," *Theology and Science*, Vol. 2, No. 2 (2004): 192-6.

operation as a secondary cause—as we have carefully distinguished this from, and related it to, God's primary causal role. Incompatibilists, though usually not intending to, effectively give God such a secondary causal role in divine special action; compatibilists carefully try to avoid any move in that direction. Of course, distinguishing these roles with precision is subject to further terminological and conceptual challenges—how do we precisely distinguish the range of God's universal creative action from what would be a secondary causal function? It is not at all clear how this distinction should be made.

5 Special Divine Action as a Mode of Divine Creative Action

Much of what we have been saying about special divine action leads me to suspect that it should not be separated from God's universal creative action, but rather considered as a particular manifestation or mode of that divine creative action, more broadly conceived. Thomas Tracy⁵⁸ points to another complementary way (other than the insights provided by "higher laws of nature" and top-down or whole-part causal metaphors). Let us briefly reflect on his suggestion and see where it leads.

The basic approach is to recognize that God's special actions within history are in virtue of God's universal role as the Creator of history. As Tracy explicates this, the key component is that "God's creative action includes the continuous 'giving of being' to the created world in its entirety," enabling each being and system of beings within creation to function and develop according to its own capacities and dynamisms, including those of conscious freely deciding and acting persons and communities of persons. It is by what material beings and systems of beings at all levels accomplish through the operation of their God-given potentialities that God continues to act creatively in the world—God acting in and through secondary causes, as we have already seen. Thus, ultimately, all that happens within the created world can be considered an act of God—in the sense of an act that God ultimately supports and allows.

But how does this approach provide a way of better understanding "God's special salvific acts" within history as manifestations of God's fundamental continuing act as Creator of all that is? Obviously, not all—and not even the vast majority of developments or actions worked by secondary causes within nature and history—would by any stretch of the imagination be considered "God's special salvific acts," even though they are ultimately supported and allowed ontologically by God's universal creative action. Most are just the result of the unconscious operation of the regularities, processes, and relationships with which God has endowed nature. And many others, initiated by human beings, and possibly by other self-reflective, intelligent entities, are undoubtedly directly opposed to the basic purposes and desires God has for creation, and to the fulfillment creation, and the various integrated systems within creation, yearn for. However, despite self-serving or evil intentions, and even the destructive character, of certain free acts, God as creator has established the potentialities and avenues within creation which enable them, and continues to sustain all that is freely chosen and executed in them, as well as those freely chosen acts, personal and communal patterns of behavior, and

⁵⁸ Tracy, "Creation, Providence, and Quantum Chance," 238ff.

cultural/political/economic structures which are in tune with God's ultimate purposes and are essentially life-giving. Furthermore, God also knows all there is to know about how the causal influences of all these events and situations fit together—even though God does not directly determine them—and how they succeed or fail to reach their divinely intended goals.

In light of this, we might suppose either (1) that God, as Creator, orchestrates all "the laws of nature" (not just those we understand and have modeled) and the initial and boundary conditions that are involved in their concrete operations, in order to insure that creation reaches its overall goal, without in any way limiting the autonomies and freedoms that have developed within creation on many different levels, or (2) that certain events or sequences of events initiated by secondary causal agents (either those which are freely and consciously choosing, or those which are not) are turning points within creation, or within history, and thus are specially revelatory of God's immanent creative presence. As such, these are in deeper harmony with God's intended purposes and with the essential structures and relationships already established with creation itself. In fact, these two alternatives are not exclusive of one another. Both may be operating in concert.

In the second case, these events or sequences of events would indeed be "God's special salvific acts," even though they were not direct acts of God (i.e., not without the intermediary of a secondary cause). Nor would they lack a sufficient cause within the manifold of dynamisms and potentialities of creation or of history, presupposing the universal primary creative action of God. They would, nonetheless, be special, salvific and revelatory, precisely because they are clear expressions of what God intends, and/or fulfill God's purposes and intentions in a particularly unambiguous or exemplary fashion. In most cases, this will be because the human, or other conscious, agents will have intuited or discerned from his or her contemplation and experience of nature or history what those intentions, purposes and goals are, and will have appropriated those and opened him or herself to all the dynamisms within creation oriented in that direction. This would normally not be the result of a single act of intuition or discernment on the part of the individual or the community, but the result of an ongoing quest to understand and to live out who we are and what nature is.

This overall approach, it seems to me, has definite advantages. It connects directly with the richly differentiated, transcendently immanent presence and action of the Creator God within creation⁵⁹ and with God's radically kenotic, deeply effective but hidden availability within nature.⁶⁰ Furthermore, it emphasizes that what is fundamental is not so much God's action, or actions, but rather God's ongoing relationship with creation. Again, the divine creative relationship is highly differentiated with respect to each entity and system within the universe—and God's action flows from the character of that

⁵⁹ William R. Stoeger, S. J., "Describing God's Action in the World in Light of Scientific Knowledge of Reality," in *CC*, 256-8.

⁶⁰ George F. R. Ellis, "The Theology of the Anthropic Principle," in *QC*, 377-99; idem, "Quantum Theory and the Macroscopic World," in *QM*, 285ff., and references therein.

relationship. In fact, it can only be understood in terms of God's relationship with creatures and communities of creatures.

This way of conceiving God's special salvific acts in terms of God's overall creative action does not eliminate the need, so to speak, for God to establish the primordial laws of nature in such a way that the divine purposes will be fulfilled in some way, despite God's surrendering detailed control of creation to the autonomies and freedoms of created causal agents—to the regularities, processes, relationships and emerging systems we refer to as "the laws of nature." As Ellis has so aptly described it, the overarching divine program is based upon and calls forth "self-sacrificing love."⁶¹ This requires, apparently, the establishment of a broad range of evolving relationships at many different organizational levels, some of which are well modeled by the natural sciences and others which are not at all describable in those terms. Among these latter are those constituting the interpersonal, the social, and the cultural, and most importantly those effecting and expressing the profound ontological connections between God and the various entities and communities which make up creation—including those involving what Christians have come to recognize as the Incarnation, and all that flows from it. Thus, in this view the Incarnation, and the Death and Resurrection of Jesus, should not be seen primarily as salvific acts initiated by the divine to rescue creation gone wrong, but as primordially intended by God as the eventual destiny and completion of creation in God. All that creation involves is directed in one way or another toward this fulfillment, and has been established to facilitate this long-range, creative-salvific plan—subject to the autonomous evolutionary unfolding of its components.

6 Conclusion

I have focused in this discussion on several aspects central to clarifying our understanding of divine action in light of what the natural sciences are gradually revealing about reality which I judge demand more attention and development than they received in the VO/CTNS Project itself. I have not fulfilled that demand, but merely attempted to point our efforts in directions I consider worthwhile.

The principal need I began to address was for a more detailed and thorough understanding—an understanding involving an interaction with the natural sciences—of *creatio ex nihilo*, and *creatio continua*, along with the closely related issues of primary and secondary causality, the inadequacy of language about God, analogy, God's knowledge of creation, as well as the shortcomings of these models and the possible ways of improving them. Whatever the limitations and frustrations of these models and the points of view they represent, we seem to be drawn back to them, even though the language we use may be different.

Other important issues I briefly revisited were: the meaning and scope of the laws of nature and of top-down, and whole-part, causality as applicable to special divine action; the meaning of determinism and its relevance for discussions of special divine action; and the attractive avenue opened up by

⁶¹ Ellis, "The Theology of the Anthropic Principle."

Tom Tracy towards developing a more fundamental understanding of special divine actions as richly differentiated modes or expressions of God's universal creative action.

The mystery of reality and of the Creator are infinitely rich and inexhaustible. We shall never adequately understand it. But I hope that these reflections, and those of my colleagues in this endeavor, serve to deepen our appreciation and wonder at what unfolds before us.