Abstract. Ian Barbour has distinguished eight theologies of God’s role in nature, together with corresponding models of divine activity. This essay examines these ideas in the light of a theology of the cross. Three of Barbour’s approaches—the neo-Thomist, the kenotic, and the existentialist—are able to provide different aspects of a theology of divine action that is consistent with belief that God's definitive revelation takes place in the Crucifixion and Resurrection of Jesus of Nazareth. These approaches encourage attention to a part of traditional doctrines of Providence, the idea that God acts by “cooperation” with natural processes. The kenotic character of divine involvement in the world means that the regularities of the basic interactions of physics are maintained. The idea of cooperation can be extrapolated into the past, to give some insight into ways of understanding God’s activity in originating the universe.

Keywords: chiasmic cosmology; Creation; Providence; theology of the cross.

INTRODUCTION

We consider here a basic question for science-theology dialogue that has been dealt with traditionally by doctrines of Creation and Providence: How is God involved in what goes on in the world? Several ways of answering that question are current in today’s religion-science discussions. I will argue that our choice of answers is narrowed considerably if we place the question in the context of Luther’s theology of the cross. This makes it possible for us to think of the basic interactions of physics as divine instruments in a way that is both theologically and scientifically coherent. This essay is, then, a contribution to what I have called “chiasmic cosmology” (Murphy 1986), the attempt to view the universe in the light of the cross and to discern the presence of the Crucified as Creator.

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MODELS OF DIVINE ACTION

The description of God in the Bible and the ecumenical creeds as “almighty” does not refer, first of all, to the popular idea that “God can do anything” but to belief that God does do everything (Kelly 1960, 136–39). Nothing happens without the God who says, “I form light and create darkness, I make weal and create woe; I the LORD do all these things” (Isa. 45:7 NRSV'). Especially when coupled with a strong emphasis on the miraculous, this belief may lead to a picture of God as the unconstrained dictator of the world.

But from very early times people realized that there are regularities in nature. God may provide “bread to strengthen the human heart” (Ps. 104:15 NRSV), but we generally have no bread if grain is not planted at the right time of year. If God is at work in the world, it is in such a way as to maintain these regularities. The divine action is not simply random. With the development of science, more and more regularities were recognized and quantified. Newtonian mechanics was able to describe the motions of bodies in the solar system with great precision in terms of a few mathematical laws.

Although Isaac Newton himself believed that God acted in the world, the successes of his system encouraged some people to believe that God did not need to do anything after creating matter and forces in the beginning. God could be pictured as the master mechanic who made the cosmic machine in the distant past and now was simply letting it run. And as science attempted to move into the past and explain the development of life, the earth, and even the entire universe, this deism could shade into atheism.

Thus there is a wide spectrum of possible answers to the question, How does God act in the world? (An important collection of essays on this topic is that of Owen Thomas [1983].) Barbour (1990, 244) describes eight “models of God’s role in nature” in table 1. (Barbour [1997, 305] has revised this classification, but the earlier version seems preferable to me.)

These approaches are not mutually exclusive. There are significant overlaps between some of them, as we will see later. Part of the modern conversation at the science-theology interface has involved attempts to find which approach is best suited to speak of God’s action in light of scientific discoveries. That is an important component of the dialogue, for an adequate description of God’s activity in the world should be compatible with what we know of the world. But the Christian theologian must be concerned with more than the current state of science. She or he must also try to discern which way of speaking about God’s activity is most consistent with the whole of the Christian message. It is to that concern that we turn first.
The doctrine of creation is important for Christianity, but it is not what makes theology distinctively Christian. Christian faith is centered on the life, death, and Resurrection of Jesus of Nazareth as God’s definitive self-revelation and saving action. Any way of thinking about God and God’s activity in the universe must finally be evaluated in terms of its relationship with this center.

One criterion for such evaluation was set out by Martin Luther as the theology of the cross. In a section of the “Heidelberg Disputation” ([1518] 1957) he contrasted the idea that human reason can discover God from observations of the world, which he described as a false theology of glory, with the belief that God can be known only from God’s own self-revelation, which takes place in weakness, suffering, and the apparent absence of God, in the cross:

19. That person does not deserve to be called a theologian who looks upon the invisible things of God as though they were clearly perceptible in those things which have actually happened. [Rom. 1:20]

20. He deserves to be called a theologian, however, who comprehends the visible and manifest things of God seen through suffering and the cross.

21. A theologian of glory calls evil good and good evil. A theologian of the cross calls the thing what it actually is.
22. That wisdom which sees the invisible things of God in works as perceived by man is completely puffed up, blinded, and hardened. (Luther [1518] 1957, 40–41)

The theology of the cross provides first a guideline for theological method. The work of theology must begin on Calvary, where God is paradoxically revealed just at the point where God is most hidden. God Almighty identifies with the weakness and suffering of Creation, and participates in its dying. But the Resurrection of the Crucified is God’s act of Creation where Creation seems impossible—life from death and being from nonbeing.

God must then be sought as the One who is always active but always hidden. The theologian of the cross will be wary of claimants to divinity who either do nothing or whose presence is supposedly obvious to people with sufficient piety or intelligence. Blaise Pascal expressed this very well with reference to Isa. 45:15: “What meets our eyes denotes neither a total absence nor a manifest presence of the divine, but the presence of a God who conceals Himself. Everything bears this stamp” (Pascal 1961, 222).

The theology of the cross also tells us what kind of content any proper Christian theology should have. The main current of biblical history bears the mark of the cross. God creates the universe out of nothing, brings Israel out of slavery in Egypt, raises Jesus from the dead, and justifies the ungodly (Rom. 4:5, 17). The task of such a theology in its interaction with science is to discern in the processes of nature the presence and activity of this God who is “placed crosswise in the universe.”

But it is important to emphasize that this is to be a theology of the cross and not, to begin with, a theology based upon general ideas of hiddenness or suffering. It begins from the cross upon which Jesus of Nazareth died outside Jerusalem in (approximately) A.D. 30. This is not simply an exemplar of the hiddenness of God or of divine revelation in humiliation but the historical event in which God is definitively revealed, the event that illumines all other phenomena and makes it possible for them to speak to us of God. The demand that faith be able to rely on general truths, accessible to people of all times and places through their intelligent observation of the world, is precisely what Luther rejected as false theology of glory. Lessing’s famous statement that “accidental truths of history can never become the proof of necessary truths of reason” (1956, 53), in its context, is an expression of such theology.

**Creation in the Light of the Cross**

We have set out the theology of the cross as our basic presupposition. The task now before us is to determine which models of God’s creative and providential work are most appropriate in the context of this theology. It would be misleading to suggest that a unique model of God’s activity can
be deduced rigorously from the theology of the cross as from a set of axioms. (In any case, such an approach would be more ambitious than this brief discussion allows.) We have already noted Barbour’s list of models for divine activity. Our purpose here is not to discuss in detail all the pros and cons of these models, as Barbour does from his own standpoint (1990, 243–70), but to consider them in the light of the theology of the cross and, thereby, to discern their strengths and weaknesses.

The classical theology of Providence (one might debate the name), modeled by the image of an unchanging monarch, does not fit well with the theology of the cross. Certainly the New Testament uses language of sovereignty and kingship to speak of Christ, but the theology of the cross says that God can suffer and die. More than this, it is through suffering and death that the reign of Christ is established (Phil. 2:5–11). “I call Him king,” said Chrysostom, “because I see Him crucified” (Ware 1963, 233).

Deistic theology pictures God as the supreme clockmaker, who constructed the cosmic mechanism and set it to run on its own. Such a picture is clearly incompatible with the theology of the cross, which sees God as profoundly involved in the world.

But while God is active in the world, this activity is hidden. At Golgotha only the absence of God is apparent to one who looks for the type of God that conventional human reason expects to find. The suffering and humiliation by which God saves the world serve to conceal God.

If God’s activity in nature is to bear this mark, it must also be hidden. This is the case if God works through natural processes as instruments, as in the neo-Thomist theology. If God acts in this way, everything in the world takes place through those processes that can be observed and understood by scientific means. As far as science is concerned, God seems to be absent from the world. Science neither can see, nor should it hypothesize, any specifically “divine” work, for it attempts to describe what happens in the world in terms of natural processes obeying rational laws.

Luther, who spoke of God’s self-revelation in the hiddenness of the cross, also spoke of the things which go on every day in the world as “masks of God”:

What else is all our work to God—whether in the fields, in the city, in the house, in war, or in government—but just such a child’s performance, by which He wants to give us His gifts in the fields, at home, and everywhere else? These are the masks of God [larvae dei], behind which He wants to remain concealed and do all things. (Luther [1531] 1958, 114)

A picture of God as absolute monarch would suggest that God insists on getting the credit for all that is accomplished in the world; but if God works in such a way as to be concealed by the very instruments God uses, then God is willing to have those instruments receive the credit. God is willing to be considered unnecessary and, therefore, to be ignored.
Eberhard Jüngel (1983), following Dietrich Bonhoeffer, has developed the implications of this aspect of the theology of the cross.

A human worker can wield a hammer or a saw in a random and unpredictable manner. The regularities of nature discovered by science suggest that God does not work that way. God’s toolbox does not hold a huge collection of unrelated instruments. The world is the arena of processes displaying definite regularities. If a ball is thrown with a certain initial velocity, its subsequent trajectory can be predicted, and a bacterial infection follows a foreseeable course.

It is conceivable that God could intervene arbitrarily in the course of nature, but it seems that God is so gracious that such interventions occur rarely if at all. This is grace, for it would be impossible for us to understand our world or to have any sort of control over our lives if God ran the world through continual miracles. The regularity of natural processes is, of course, what makes science possible. Even more fundamentally, it makes responsible human life possible. This also means that cancer and earthquakes will take their course and will not be stopped miraculously. That is the price paid for a lawful universe. God, in other words, has apparently chosen a course of self-limitation, acting only (with the possible exception of a set of events of measure zero) through the rational pattern of relationships that God has created.

This suggests that our understanding of God’s activities must use some features of kenotic theology, in which God’s action is seen to be like that of a parent voluntarily limiting her- or himself in interaction with a child. Such a view also is at the heart of the theology of the cross. The very term kenotic comes from the passage that tells of the one “who, though he was in the form of God, did not regard equality with God as something to be exploited, but emptied [ekenōsen] himself, taking the form of a slave, being born in human likeness. And being found in human form, he humbled himself and became obedient to the point of death—even death on a cross” (Phil. 2:6–8 NRSV).

Now if the divine activity cannot be observed directly or inferred from scientific observations, only faith can see that God is at work through natural processes. We begin with this faith and do not try to prove scientifically that God is at work. Theological contemplation of the scientific picture of the world is rather in the spirit of Anselm’s “faith in search of understanding” (Barth 1960).

Thus there is some truth in what Barbour characterizes as the existen
tialist theology of divine action. “Faith” is not simply a matter of believing things we are unable to prove, but of personal commitment, and it is by virtue of such a commitment to the God revealed in the cross of Christ that we can see God’s activity in the world. This is the emphasis that
Luther gives in his *Small Catechism* (Tappert 1959, 344–45) when he explains creation in terms of God’s provision for the life of the believer.

But if we concentrate exclusively on faith, understood as personal commitment, we may conclude with Rudolph Bultmann that God can only be said to be the creator of our individual lives:

First, only such statements about God are legitimate as express the existential relation between God and man. Statements which speak of God’s actions as cosmic events are illegitimate. The affirmation that God is creator cannot be a theoretical statement about God as *creator mundi* in a general sense. The affirmation can only be a personal confession that I understand myself to be a creature which owes its existence to God. (Bultmann 1958, 69)

Conflict between science and theology is thereby removed, but so is the possibility of any dialogue between them.

The error to which existentialist theology is prone is not its emphasis on personal faith but the tendency to think that a person can be understood adequately as an individual isolated from the rest of the world. We are fully human only in community. In the biblical tradition, the covenant community includes not only human beings but the earth and all living things (Gen. 9:8–17, Lev. 25:1–24, Hos. 2:18). Coming from a different direction, evolutionary biology and ecology show us how our humanity is inextricably linked with the whole biosphere. Life itself is possible only because of the formation of carbon by fusion reactions in stars and other cosmic processes. I must speak of God as *creator mundi* in order to speak of God as *my* creator.

*Linguistic* approaches to the question of divine action tend toward a disjunction between theology and scientific descriptions of the world. What happens in the world can be discussed either in terms of God’s intention for the world or in terms of the network of physical relations between events. There is no necessary connection between these languages.

Such a theology speaks about God’s involvement in the totality of world history but not about a God who acts with specific purposes in specific events. That may seem like an appealing way to describe God’s “ordinary” work in the world, but it is less attractive when we realize that it would also apply to what the biblical tradition sees as specifically salvific acts of God and, in particular, the cross. Barbour summarizes this problem by saying that in such a view “Christ seems to be special only because of the way we respond to him, not because of any special divine action in his life” (1990, 258).

Theologies of *embodiment* encounter some serious problems when it really comes to describing God’s action in the world (Barbour 1990, 258–59; Polkinghorne 1989, 18–23). From a christological standpoint, the chief difficulty with such a theology is that it must downplay the idea of a unique divine embodiment in Jesus of Nazareth. (See Heb. 10:5–10)
NRSV.) It is possible to speak of the world as God’s body, but that embodiment is to be understood as proceeding from the Incarnation, in the spirit of the Letter to the Ephesians. The classical Lutheran teaching that the divine omnipresence has been communicated to the humanity of Christ (Schmid 1961, 294–337) provides one approach to developing such an idea in dialogue with modern cosmology (Murphy 1988). But to start from the idea of the world as God’s body is to begin at what should be the conclusion.

The situation is similar for process theology. Its insistence that God participates in the travails of the world has a good deal in common with the theology of the cross: Alfred North Whitehead’s (1969, 413) description of God as “the great companion—the fellow-sufferer who understands” is a prime example. Process thought, however, is in danger of seeing the cross of Jesus as simply one important example of this participation of God in the world. We begin at Golgotha and, from God’s self-revelation there, learn how to see everywhere the God who is “placed crosswise in the universe.”

DIVINE CO-OPERATION

The neo-Thomist and the kenotic theologies of divine action are best suited to provide a description of divine action in the world that is in accord with the theology of the cross, although it is essential that we also emphasize the element of faith that is fundamental to the existentialist approach. In fact, these three theologies may best be seen as different aspects of chiasmic cosmology’s view of Providence. The neo-Thomist approach, in which God can be pictured as working with natural processes as instruments, comes closest to an actual description of the way God acts. The kenotic theme provides the crucial insistence on God’s self-limitation to use of the lawful processes that God has created. And the existentialist approach reminds us that we recognize God at work through natural processes only by our personal commitment of faith.

Doctrines of Providence have traditionally given detailed expression to such ideas (Aquinas 1975; Schmid 1961, 170–94; Farley 1988). Providence was seen to consist of God’s work of preservation of the created world, concurrence or co-operation with the actions of creatures, and governance of the universe. God keeps things in existence, co-operates in their actions, and directs them to the accomplishment of the divine purpose.

If the things of the world are understood in terms of static natures, the idea of preservation will be emphasized. If our physics, like that of Aristotle, holds that things happen in order to accomplish some end, government may be stressed. This was the case for earlier theologians, who treated concurrence as an aspect of the divine government.

Today’s scientific picture of the world calls for a different emphasis. From its smallest to its largest scales, the universe is dynamic. This is not
simply a matter of objects with static qualities moving in different ways. Relativistic quantum field theory forces us to unify the concepts of substance and structure, and almost to say that matter is made up of its interactions: A “bare” electron is an unobservable theoretical entity. A particle observed in the laboratory is “dressed,” a result of possible interactions with other particles.

If the world at a basic level is interaction, it makes sense to emphasize God’s involvement with dynamic processes over preservation of static natures. Concurrence will be given more attention than preservation. With a dynamic picture of the cosmos, the concept of preservation can even be subsumed under that of concurrence.

In this view, God acts in the world with, and by means of, creaturely actions. Created things are tools or instruments that God employs. A job can be said to be done, in different ways, both by the tool and by the worker who wields it. Of course, models have limitations and can be misleading if these limitations are not observed. A human worker may need to have a tool made by someone else, but one implication of the Nicene Creed’s statement that God is “maker . . . of all that is” is that God is ultimately the maker of every tool God uses. (In the collection of rabbinic sayings Pirke Aboth [Herford 1962, 129–31], the last of the objects said to have been made “on the eve of Sabbath” is “the tongs made with the tongs.”)

In the last analysis, the basic processes of nature must be seen as the instruments with which God works. We now understand these processes in terms of gravitational, electromagnetic, strong, and weak interactions among particles, and progress has been made toward theoretical unification of these four forces. Furthermore, the basic elements of which matter itself is composed are intimately related to these interactions. A unified description of all particles and interactions, a “theory of everything,” is seen as a real possibility by some theorists (Barrow 1991; Glashow 1988).

The word concurrence might suggest that God merely acts alongside creatures. The term co-operation gives further insight, for it means literally that God works with creatures. In the language of classical theology, the divine energeia, or operations, function with the energeia of creatures. The word energeia is suggestive, for it lies behind the important concept of energy in modern science. In a mathematical description of a physical system, the energy of the system generates its temporal development. We will thus see the divine operations acting through the physical in order to bring about the evolution of the world. Such a description parallels that of classical christology, in which, according to the Sixth Ecumenical Council, God Incarnate possesses both divine and human operations that act in concert (Murphy 1994a).
BACK TO THE BEGINNING?

To this point we have discussed God’s ongoing action in the world, the traditional domain of doctrines of Providence. This was seen as part of God’s creative activity but subsequent to God’s initial creation of the universe, which was considered a separate and unique divine work. We may ask, however, how useful that distinction is. God works in the world today through natural processes that also operated in the past. Biological evolution has brought about the different types of living things on earth. Before that, gravitational condensation and nuclear fusion gave rise to our sun and planetary system. As we go further back in time, we can describe the formation of the chemical elements in stellar interiors, the evolution of galaxies, and the formation of light nuclei in the first minutes of the Big Bang. At even earlier epochs, quantum field theories attempt to describe the generation of elementary particles and of space-time itself (Börner 1993; Drees 1991). Of course, a good deal of speculation is required for such efforts. There is, however, no reason to stop trying to extrapolate the known laws of physics at any particular instant in the past. Science by itself cannot explain why the laws that it discovers are effective in the world—but, given that they are, it may be able to explain how the universe that we know has come into being.

Such explanation may at first seem disturbing to those who believe in divine creation. God would be upstaged by God’s own creatures, to which science gives all the credit for the generation of the world, but that is just the kind of thing that the theology of the cross ought to lead us to expect. God always works, but in hidden ways, and the divine activity that is in, with, and under the operations of creatures is discerned only by faith (Murphy 1994b).

Haydn captured the right note in his oratorio *The Creation*. God’s initial command for the creation of light comes almost in a whisper: “Und Gott sprach: ‘Es werde Licht!’ Und es ward”—and then a thunderous “LICHT.” The roar of Creation drowns out the still small voice of the Creator. God is willing to be upstaged by God’s own work, in such a way that the world itself (though not God) can be understood by studying it.

We thus find, both in the origination and the ongoing processes of the universe, that God’s action can be understood in terms of the theology of the cross (expressed in Isa. 45:15 NRSV): “Truly, you are a God who hides himself, O God of Israel, the Savior.”

NOTES

2. *Theologia crucis* in the sense discussed here received little explicit attention between Luther’s time and the twentieth century. A classic treatment is von Loewenich (1976). See also McGrath (1985).
3. Plato says in the *Timaeus* that the Creator shaped the World-Soul into two bands and “placed him crosswise [ἐχιασεν] in the universe.” (He is thinking of the intersection of the equator and ecliptic on the celestial sphere.) Saint Justin Martyr (1979, 183) cited this as a prophecy of the cross of Christ. For elaboration of the image, see Murphy (1986 and 1991).

4. McFague (1993, 159) is a clear example. The characterization here of the doctrine of the Incarnation as “offensive” is an indication that a theology of glory feels threatened by it.

REFERENCES


