

The Emergence Of Spirit

It's not typical for theologians to learn much from bankers. Recently, however, one renegade financier by the name of Sir John Templeton has been making some strange recommendations for theology that at least some theologians are heeding – and not only because he has put the rather substantial resources of the John Templeton Foundation behind his ideas.

“Spiritual Information”

Mr. Templeton's recommendations are based on the notion of “spiritual information.” Readers of *The Christian Century* need no reminding of exactly how unfashionable this notion is. After all, we live in the “age of hermeneutics,” in which the idea and ideals of objectivity often take a back seat to the intricacies of interpretation. Beyond hermeneutical sensitivity, though, some “postmodern” theologians proclaim that theology is *only* about the feelings and subjective perceptions of the speaker, writer or religious community. Thinkers like the British theologian Don Cupitt promote the vision of a theology set free from *any* sort of reference outside itself. On Cupitt's view, theological statements cannot provide information about anything more than the mental states of the speaker or the linguistic and political systems in which she is embedded.

Mr. Templeton, by contrast, seeks information about spiritual realities. For Christians that

would mean, among other things, information about God and God's actions in the world. The notion of pursuing new “spiritual information” — theology as a natural science, if you will — is controversial, to say the least. It has not lacked for critics.

This idea of pursuing new “spiritual information” has a second implication, which is also *contra tempus*. The thesis is that we should concentrate on areas of the human intellectual quest where new information is becoming available, where knowledge is increasing. In our current intellectual world that means, paradigmatically, looking to the sciences as allies to the theological project. Herein lies the real controversy of Mr. Templeton's suggestion and the focus of this article. For what does it mean to speculate about the nature of God based on the most recent scientific breakthroughs?

Enough has been written in the pages of *The Christian Century* about the exploding religion-science discussion and its growing impact on the self-understanding of theology; those roads don't need to be retraced here. Suffice it to say by way of summary that the religion-science movement is having an impact on pastors, theological educators and congregations akin to the huge influence of “spirituality and science” discussions in the broader society.

Instead of chronicling the impact of the movement, I would like to make a concrete proposal about what might happen to the doctrine of God if we indeed trace out the speculative lines suggested by the most recent breakthroughs in natural science. Theologically trained readers will recognize the influence of the German theologian Wolfhart Pannenberg in what follows, though they'll detect divergences as well. (The presentation is non-technical, and unashamedly so; those interested in the full theories and further references can find a fuller account in my

forthcoming *The Emergence Of Spirit*.)

The Divorce That Never Existed

Natural science (or “natural philosophy”), it turns out, has always offered a framework for conceiving God — or for dispensing with the concept of God, as the case may be. Consider just a few brief examples. As Augustine realized, Plato’s forms needed to be located *somewhere*, and the mind of God was the natural place to put them. Hence, Augustine could argue, since any successful science requires the existence of forms, there must be a God to eternally think them. No God, no science.

Aristotelian science, dominant in the West for nearly 1500 years, just as clearly required a God, at least according to St. Thomas’s masterful interpretation. Consider, for example, the famous doctrine of the “four causes.” From Aristotle to (roughly) Galileo, “to do science” just meant to discover the four causes of a thing. As we saw above, the forms (*formal causes*) require a divine mind in which they can be located. Assuming that matter, or the *material cause* of a thing, is not eternal, it must be created — by God, of course. *Efficient causes* — say, the sculptor who transforms a block of marble into a statue of Athena — exist as separate from God; but since they are contingent, they too require God as their ultimate cause. And the *final cause*, or goal toward which everything develops, is of course God, for God must be the one who brings about the final outcome of the earthly process in accordance with the divine aims. Hence, again: no God, no science.

I have mentioned only St. Augustine and St. Thomas, but dozens of other examples of the intimate union of science and theology could be listed — nearly as many as there are theologians!

Admittedly, connecting science or “natural philosophy” and theology became progressively more difficult as the modern era progressed. Yet even as late as Newton a compelling line of speculation still seemed to lead from science to God. To use that controversial phrase again, the science of the day seemed to provide “spiritual information” about the nature of God. It appeared that Newton’s laws could account for the interactions of all bodies in the universe. Yet, as Newton saw, applying these laws required an ultimate, unchanging framework of “absolute space” and “absolute time” within which bodies moved. This framework could only be located within God, as the eternal object of God’s thought — or at least it could only exist with the concurrence of God’s will and as a reflection of the divine nature. Hence, it seemed, the greatest insight in the history of physics, Newton’s laws, still communicated something of the nature of God.

The New Science of Emergence

With this background in place, it’s now possible to state my central argument. It consists of two theses. First, beginning shortly after Newton and continuing until very recently, most of the dominant scientific models left precious little place for the sort of theological connections we have been considering. The explosion of scientific knowledge, the predictive accuracy of mathematical physics, the emergence of evolutionary science based on random variation rather than on purpose, the controlling paradigm of reductionism, the dominance of materialist

explanations and assumptions — all of these developments made science-based theological speculations difficult and even, in the eyes of many, impossible. The story of the modern warfare between science and theology has been well told elsewhere (see, among others, the works by John Hedley Brooke) and need not be repeated here.

Let's focus instead on the more controversial second thesis: *the last few decades have brought an important new opening for science-based reflection on the nature of God*. This opening lies in the ascendance of the concept of *emergence*, and more recently in the development of the new field of Emergence Studies. What is this new concept, and why does it so clearly give rise to speculation about God? Finally, assuming that it does, what might one conclude about the nature of God based on the new sciences of emergence?

In one sense it's a truism to note that things emerge. Once there was no universe and then, after the Big Bang, there was an exploding world of stars and galaxies; once the earth was unpopulated, and later it was teeming with primitive life forms; once there were apes living in trees, and then there were Einstein, Mozart and Ghandi. But the new empirical studies of emergence move far beyond truisms. A growing number of scientists and theorists of science are working to formulate the fundamental laws that explain why cosmic evolution produces more and more complex things and behaviors, perhaps even by necessity. Especially significant for religionists, they are also arguing that the resulting sciences of emergence will break the stranglehold that reductionist explanations have had on science. Attention is turning to what we might call *the laws of becoming*: the inherent tendency toward an increase in complexity, toward self-organization, and toward the production of new emergent wholes that are more than the sum of their parts. Perhaps, many now suggest, it's a basic rule or pattern of this universe that it give

rise to ever more complex states of affairs, ever new and different emergent realities. (See, among many recent works, Stuart Kauffman's *Investigations* and Harold Morowitz's *The Emergence Of Everything*.)

The Theological Bottom Line

Assume for a moment that these theorists are right and that it is an inherent feature of our universe to produce new types of entities and new levels of complexity. What might this fact tell us about the existence and the nature of God?

Traditional theology looked backwards; it postulated God as the cause of all things. Emergentist theology looks forwards; it postulates God as the goal toward which all things are heading. Moreover, if God stood at the beginning and designed a universe intended to produce (e.g.) Jesus, then God would have to use deterministic laws to reliably bring about the desired outcomes. Where the deterministic processes, left on their own, are insufficient to produce a theologically acceptable world, God would have to intervene into the natural order, setting aside the original laws in order to bring about a different, non-lawlike outcome. Divine action then becomes the working of miracles, the breaking of laws; and God becomes, paradigmatically, the being whose nature and actions are opposed to Nature. Of the results of this disastrous dualism, the opposition of God and Nature, readers of *The Christian Century* are well enough aware.

By contrast, emergence suggests a very different model of the God-world relationship. On this model God sets in motion a process of ongoing creativity. The laws are not deterministic

laws. Instead, they are “stochastic” or probabilistic: although regularities still exist, the exact outcomes are not determined in advance. More and more complex states of affairs arise in the course of natural history through an open-ended process. With the increase in complexity new entities emerge — the classical world out of the quantum world; molecules and chemical processes out of atomic structures; simple living organisms out of complex molecular structures; then, gradually, complex multi-cellular organisms, societies of animals with new emergent properties at the ecosystem level, and, finally, conscious beings who create culture, use symbolic language — and experience the first intimations of transcendence.

Conceived according to the model of emergence, God is no longer the cosmic law giver. Thus the result is a far cry from Calvin’s God who must predestine all outcomes “before the foundation of the world.” Instead, God guides the process of creativity; *God and creatures together* compose the melodies of the unfolding world, as it were, without pre-ordaining the outcome. Emergentists note that this God must rejoice in the unfolding richness and variety, apparently willing to affirm the openness of the process and the uncertainty of particular outcomes. On this model, God’s finite partners are the sum total of agents in the world, and all join in the process of creation. In Philip Hefner’s beautiful phrase, we become “created co-creators” with God.

Finally, on the emergence model God does not sit impassively above the process, untouched and unchanged by the vicissitudes of cosmic history. Instead, there must be emergence within God as well. God is affected by the pain of creatures, is genuinely responsive to their calls, acquires experiences as a result of these interactions that were not present

beforehand — all ideas familiar to readers of process theology or (to cite only one example) Jürgen Moltmann's *The Crucified God*. Ultimately, is not such a picture of God closer to the biblical witness than the distant God-above-time of classical philosophical theism?

Emergence and Panentheism

How radically should God's closeness to the world be thought? Should emergence-based reflection on the nature of God be allowed even to cast the very separation between God and world into question? A major school of late-twentieth century theology known as *panentheism* argues that the world is more correctly understood as located *within* the divine being rather than as separate from it (see Arthur Peacocke and Philip Clayton, eds., *In Whom We Live And Move And Have Our Being*, forthcoming from Eerdmans in November 2003). Panentheists, reflecting on the scientific evidence and willing to explore the intimate interdependence of God and world, now conceive the world as "within" God and God as "in, with and under" all existing things (to adapt Luther's language for the sacraments).

Does all this mean that, given the turn to emergence, the transcendence of God will be lost and the divine will be completely "immanentized"? Such was the famous claim of Samuel Alexander in *Space, Time And Deity*: as the world gradually develops more and more complex structures, it becomes more God-like or (in Alexander's atrocious neologism) it "deisms." On such a view, "divinity" is a property that *the world* develops in the course of emergent evolution. There is no longer a transcendent God, only an emerging, fully immanent one.

Some may wish to go this far, but emergence in the natural world does not require it. As a theological model, panentheism is responsive to the emergentist turn yet able to preserve a basic (and highly desirable!) feature of traditional theology: the transcendence of God. For panentheists, the world is in God, but God is also more than the world. Fundamental differences in the natures of the two remain: God is necessary, the world contingent; God is eternal, the world limited in duration; God is infinite, the world finite; God is by nature morally perfect, the world... well, that one is obvious.

The Political Agenda of Emergentist Theologians

With this last heading we finally reach the social and political implications of emergentist panentheism — the dimension that for many is the strongest attraction for the position. The first implication was already implicit in the opening paragraphs: a doctrine of God inspired by emerging scientific models is speculative rather than dogmatic, not fixed in stone but open to new information and revisions. It is a dialogue partner in the political process, not a final authority or arbiter of all truth. Moreover, a God who is intimately involved in the world, who is responsive to its joys and its suffering, can never be apathetic to the injustices in the world. And if each of us is in some sense “within” the Divine, then our striving for justice is itself part of the unfolding purposes of God.

There is no moral triumphalism here, however. The mystery of evil is pervasive: how can God allow evil actions when these now take place not “at the far ends of the earth” but within the divine being itself? No less decidedly, however, emergentist panentheism also testifies to the

mystery of grace: somehow the divine love is such that it even tolerates imperfection within itself — presumably because, due to some metaphysical necessity beyond our ken, it is not possible to create finite, limited agents without their engaging in actions that are imperfect, short-sighted, self-serving. That evil exists in our societal structures and in our very souls is for panentheists not an invitation to quietism, but rather a clarion call to action. Since we live “in, through and under” the divine presence, it behooves us to do everything that lies within our power to make the world around us reflect more clearly the divine source and presence to which it owes its very existence.