

## **Divine Action**

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Is divine action the most pressing issue in religion-and-science dialogue today? I do not think so. But it certainly is an issue that lurks behind many of the topics discussed in the dialogue between faith, theology and science.

In the New York Times some weeks ago, Yale psychologist Paul Bloom stated: “The great conflict between science and religion in the last century was over evolutionary biology. In this century, it will be over psychology, and the stakes are nothing less than our souls.”<sup>1</sup> I tend to agree with him except for two things: 1. It is not only psychology but also the whole conglomerate we call the cognitive sciences that – in challenging ways – will ask for thoughtful theological reception, and 2. Conflict is not the only option there is. If there is anything we have learned from decades of constructive engagement between religion and science, it is that the range of interaction is considerably more multi-faceted than that.

If divine action is not the most pressing issue on the agenda, it still is one of the important underlying questions. Because, if we cannot in any reasonable way conceive of God’s action in the world, then all our efforts to understand evolution and creation as well as brain research and religious experience in a comprehensive way are futile. Indeed, in that sense the question of divine action sort of belongs to what we theologians usually call the *Prolegomena* - the things you need to deal with before you get to the real stuff.

I am going to deal with my topic in three steps. First I will state the problem. Then I will discuss a couple of suggested solutions. I will conclude by listing some relevant theological resources.

### **The Problem**

In its simplest form the problem boils down to the question: Who is acting – God or nature? Is nature a system that can be explained in its own terms, that is, in terms of natural processes and causes, or is God acting in nature? Put this way, the problem reads: either God or nature.

However, there has not always been this apparent either-or of nature and God. In the year 378<sup>2</sup>, the church father Basil of Caesarea, one of the so-called three Cappadocians, delivered a series of nine sermons on Genesis 1, 1-25. These sermons are quite amazing, because Basil includes a lot of information about botany, zoology, geography and astronomy, most of which reflects very well the level of scientific knowledge of that time.<sup>3</sup> It is even more amazing how easily Basil moves between “God” and “nature” as actors in creation. Here are some quotes that exemplify the active causal role he attributes to nature: It is nature that “encloses the costly pearl in the most insignificant animal, the oyster”<sup>4</sup>; nature has placed the grain of the wheat “in a sheath

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<sup>1</sup> Paul Bloom. The Duel Between Body and Soul. New York Times. Sept. 10, 2004.

<sup>2</sup> According to some sources. Other dates are also suggested.

<sup>3</sup> Except for geography, where Basil seems to be behind the standards of his own time. Saint Basil. Exegetic Homilies. Translated by Sister Agnes Clare Way, C.D.P., Washington, D.C.: The Catholic University of America Press, 1963. x.

<sup>4</sup> VII 6, p. 115.

so as not to be easily snatched by grain-picking birds”<sup>5</sup>; nature has placed such powerful organs of voice in the lion “that frequently many animals that surpass him in swiftness are overcome by his mere roaring”<sup>6</sup>. Animals follow “the law of nature strongly established and showing what must be done”<sup>7</sup>, and so do humans: we have got “natural reason which teaches us an attraction for the good and an aversion for the harmful ... implanted in us”<sup>8</sup>, and we have “natural virtues toward which there is an attraction ... from nature itself”<sup>9</sup>. Basil goes so far as to say that teachings about social order are not introducing anything new; they are merely a continuation of natural order. When Paul gives directions regarding the relationship between parents and children, he recommends nothing new, according to Basil. Paul just “binds more tightly the bonds of nature.”<sup>10</sup> Nevertheless, in spite of the active causal role Basil attributes to nature and the law of nature, he has no problem whatsoever to see God in the same things. Basil praises the sea urchin for its capacity of forecasting calm or rough waters by its behavior. By this, Basil concludes, “the Lord of the Sea and the winds placed in the small animal a clear sign of His [God’s] own wisdom.”<sup>11</sup> Hence: “There is nothing unpremeditated, nothing neglected by God. His unsleeping eye beholds all things. He is present to all, providing means of preservation for each.”<sup>12</sup> For Basil, God apparently acts “in, with and through” nature and there is no contradiction in that. So where does the problem come from?

The question of divine action became a problem in the light of the success of physics. The stronger modern (a.k.a. classical) physics became, the more the universe appeared to be a closed physical system, where interactions are regular and lawlike, where processes can be accounted for in terms of their causal histories and where all irregularities eventually will have perfectly natural explanations. The question then reads, “how can one attribute events to the causal activity of God when science is based on the assumption that any given event is part of a closed system of natural causes?”<sup>13</sup>

Before we turn to a discussion of possible solutions to the problem we must be clear about the philosophical framework that has shaped the way we usually talk about causes. The scheme of cause and effect that has had a strong influence on Western tradition originated from Aristotle who distinguished between four types of causes: material causes that describe the effect that matter has on a thing (the properties something has in consequence of the matter it is made of, e.g. a flammable material will burn); formal causes that work through the form that is inherent to an organism (e.g. what transforms a caterpillar into a butterfly); efficient causes - probably the most familiar to us - that operate between objects in order to move or change them; and final causes, that explain changes in terms of the final purpose of something (that which moves an organism toward that for which it was designed, its *telos*) These definitions were adopted and modified by Thomas Aquinas. In the shape Thomas gave them they continue to influence theological and philosophical thought in our days. Thomas retained the first three kinds of causes and reinterpreted the fourth one. Final cause, according to Thomas Aquinas, means the overall purpose of God. He insisted that all four causes are represented in every event. This means that apart from the three “natural” causes (material, formal, efficient) there is a divine cause involved in every event. These two categories of causes are often referred to as primary (God) and secondary (nature) causes.<sup>14</sup> Neo-Thomists, such as Austin Farrer, have applied Thomas’s thought

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<sup>5</sup> V 3, p. 71.

<sup>6</sup> IX 3, p. 139.

<sup>7</sup> VII 4, p. 112.

<sup>8</sup> VII 5, p. 113.

<sup>9</sup> IX 3, p. 141.

<sup>10</sup> IX 3, p. 141.

<sup>11</sup> VII 5, p. 114.

<sup>12</sup> VII 5, p. 114.

<sup>13</sup> Philip Clayton. 2004. “Natural Law and Divine Action: The Search for an Expanded Theory of Causation”. (Zygon 39:615-636) 616.

<sup>14</sup> Cf. Aquinas. 1956. On the Truth of the Catholic Faith: Summa Contra Gentiles, Book III. Providence, transl. By V.J. Bourke, Garden City, NY: Doubleday. 226-235. Aquinas. 1975. Summa Theologiae, Volume 14: Divine Government (Ia.105.5), transl. By T.C. O’Brien. London: Eyre & Spottiswoode. 75-79.

in the theory of “double agency”.<sup>15</sup> It holds that God is the primary cause of all that is. Yet, God works consistently through secondary causes, represented by the laws of nature and the activities of conscious agents.

It seems that the interpretation of two things are key to how we can understand divine action, namely the interpretation of cause and of the existence of causal gaps that would allow a connection between natural causation and divine causation (often called ‘the causal joint’). Is there an opening in the causal structure of the natural world that allows for divine input? Is such an input compatible with a scientific worldview? Is the plausibility of divine action the most we can hope for, or can we go so far as to claim that accounting for divine action represents an increase in knowledge about the natural world that should be taken into account by everybody?

### Solutions

Many of you may know that Newton in spite of his powerful synthesis of earthly and celestial mechanics could not account for certain planetary movements. In spite of the foundational lawfulness of natural processes there remained irregularities in some planetary orbits that might increase “till this system wants a reformation”<sup>16</sup>, as Newton expressed it. This reformation, of course, was supposed to be God’s job. Thus was born the unfortunate concept of the God of the gaps.<sup>17</sup> It means a God filling in the gaps of current knowledge and consequentially, as the level of knowledge advances, a God who gets pushed more and more to the margins and into irrelevance. No wonder that Pierre de Laplace, when asked where God was in his cosmological system, answered, “I had no use for this hypothesis,” because in his days, the problem of the apparently irregular orbits had been solved. God, in Newton’s understanding, was an omnipotent being whose role was to manage a world that was more and more understood in analogy with a clockwork mechanism. Newton could not foresee that his Clockmaker God would very soon be condemned to inactivity due to the excellent functionality of the clockwork. Newton’s God ended up both homeless and jobless. It is easy to see that the location of divine action at the edges of current knowledge is a bad one. It illustrates all too well the saying that the theology who marries the science of today may well find itself widowed tomorrow.

I take this example to disqualify so called interventionist divine action, implying a God who intervenes and tinkers with efficient causes to the point of violating the laws of nature. What other solutions are possible that honor the best of both theological and scientific knowledge? Such solutions should be able to account for an ongoing divine activity that avoids at least a strong form of interventionism. Broadly considered, I can see three different types of proposals.

*Limited divine action:* Proposals that follow this model suggest something along the lines of what also has been called “uniformitarian divine action”<sup>18</sup>: God is the origin of all things, the initiator of creation; the rest is up to natural order. This is the solution adopted by deism. It is reconcilable with the doctrine of creation out of nothing (*creatio ex nihilo*), but it is not reconcilable with the concept of continuous creation (*creatio continua*) including God’s sustaining and at least occasionally intervening action. It seems like a rather minimalist and thin concept. God acted once, and that’s it. This model allows us to speak about General Divine Action in exceedingly broad terms, but it does not give room for Special Divine Action. It leaves many of the most salient features of the Christian story unaccounted for. It cannot explain how God can act in history (as the Old Testament persistently claims), how God can become incarnated and redeem the world in Jesus Christ, how God can empower men, women and

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<sup>15</sup> Cf. Farrer, Austin, in Thomas, Owen C., ed. 1983. *God’s Activity in the World: The Contemporary Problem*. Chico, CA: Scholars Press.

<sup>16</sup> Alexander, H.G., ed. 1956. *The Leibniz-Clarke Correspondence*. Manchester: Manchester University Press. 180.

<sup>17</sup> According to Southgate, Christopher, et al. 1999. *God, Humanity and the Cosmos: A Textbook in Science and Religion*. Edinburgh: T & T Clark, 247, the phrase ‘God of the gaps’ was coined by Coulson 1958, 41.

<sup>18</sup> Peters, Ted and Martinez Hewlett. 2003. *Evolution from Creation to New Creation: Conflict, Conversation, and Convergence*. Nashville: Abingdon Press, 30, 118.

children with the Holy Spirit, and how God can lead the world toward its consummation in the *eschaton*.

*Parallel Divine Action*: God acts at a different level than the level of scientific observation. This model builds on the distinctions between causes introduced by Aristotle and interpreted by Thomas Aquinas. The distinction between primary and secondary causation allows the assumption that God acts in every event, yet at a different level, a level that per definition would not be susceptible to physical description. I see it as a strength that such a model allows for leaving behind the Humean definition of a miracle as something that violates the laws of nature. Instead, it allows us to think of miracles in terms of entanglement of two or more causal chains creating enormously unlikely coincidences although all the elements that lead to such coincidences appear to be in perfect consonance with the laws of nature.

However, parallel models have also got their flaws: they support a two-world-thinking. There are no compelling reasons for why scientists should take the level of divine causation seriously; it seems totally irrelevant to understanding and interpreting the natural world. On the other hand, scientists cannot repudiate it either, because it is per definition outside the competence of scientific observation.

Furthermore, the concept of primary causation is difficult. If it is the same as original causation, then we end up with the same problems as with limited divine action. If it includes continuous causation, it begs the question, what if causation on the primary level contradicts secondary level causation? Probably, such a conflict would mess up the laws of nature. However, so far that has not been observed. If, on the other hand primary and secondary causation are in harmony, then why assume two causations? Again, God's causation appears as an unnecessary assumption and can or even should therefore be neglected.

None of these models seem really satisfying. Therefore, I now turn to some proposals that I choose to call models of *Entangled Divine Action*. Those models assume that, in one way or another, divine action takes place within the framework of natural processes such as we can describe them with scientific methods. Wise from the failure of the Newtonian concept of God, one will want to make sure, however, not to end up in the God-of-the-gaps trap once again. This effort is supported by developments in science, ranging from evolutionary biology to quantum physics that move us beyond a deterministic paradigm toward an indeterministic view of nature. Within the framework of non-deterministic nature, basically three strategies have been used, namely top-down, whole-part and bottom-up causation. Arthur Peacocke is one of those who have explored top-down approaches for example. Such approaches attempt to show how processes at higher levels of complexity can influence those at lower levels. Whole-part causation models have been developed by both Peacocke and John Polkinghorne. While Peacocke draws on non-equilibrium thermodynamics, Polkinghorne<sup>19</sup> uses chaos-theory in order to show that unpredictability allows for an input of divine information that enables God to act without having to break or suspend the laws of nature.<sup>20</sup> However, both face the difficulty of making plausible how thermodynamics and chaos theory which both are fully deterministic according to our present level of knowledge, can achieve the ontological openness that is needed in order to account for special divine action.

In terms of bottom-up approaches, quantum indeterminacy seems to recommend itself as the ideal candidate. It offers gaps, but of a different kind. If Heisenberg continues to be right, and the Einsteinian type of hope for new underlying deterministic theories continues to fail,<sup>21</sup> then

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<sup>19</sup> See e.g. Polkinghorne. *Chaos Theory and Divine Action*. In: *Religion and Science: History, Method and Dialogue*, ed. By W.M. Richardson and W.J. Wildman. London: Routledge. 243-252.

<sup>20</sup> On Peacocke and Polkinghorne and a comparison of their thought on divine action, see Southgate, 256-259.261-267.

<sup>21</sup> This depends at least in part on the outcome of discussions of different interpretations of quantum theory, especially of the so-called measurement problem. Part of the problem is that that the unresolved debate between various interpretations of quantum physics is philosophical rather than scientific, because it is deeply influenced by metaphysical assumptions about causality.

quantum indeterminacy seems indeed to be the promised land for a consistent theory of divine action. Because these gaps are not epistemological but ontological, they do not reflect the limits of our knowledge, but the ontological structure of nature as it is. Thus, they provide a space for God to influence processes without violating the laws of nature. Their strength is that they allow for a description of noninterventionist, objective, special divine action. One of the most prominent proponents of this view is Robert John Russell. According to him, the quantum model of divine action achieves a lot:

... we can view nature theologically as genuinely open to God's participation in the bringing to actuality of each state of nature in time. Where science employs quantum mechanics and philosophy points to ontological indeterminism, faith sees God acting with nature to create future. This is neither a disruption of the natural process nor a violation of the laws of physics. Instead, it is God fulfilling what nature offers ... acting specifically in all events, moment by moment.<sup>22</sup>

Nevertheless quantum based models of divine actions have also been critiqued extensively. Theologians and Christians in general may find the very attempt of defining quantum intervention as the specific place for divine action deeply unsatisfactory. Nailing God's action down to the very spot of quantum processes seems to contradict both the idea of who God is and what the task of a theologian is. One may also find that in spite of the significant difference between classical mechanics and quantum mechanics these models still have too much of a taste of God of the gaps. Also, what does the limitation to the subatomic level actually mean? Even if the laws of quantum mechanics are probabilistic, they are still laws. Doesn't that fact limit God's freedom to act? Is it possible to draw a line from such a microscopic level to events on the macroscopic level?

It seems that, if we locate the place for divine input on the quantum level, we need to identify an amplifying system that makes the quantum level input effective on a macroscopic level. However, it has been argued that the amplifying systems we know of are far too slow and too sensitive to distortion in order to make good candidates.<sup>23</sup> "Because there is a temporal gap between the moment of the quantum event(s) and emergence on the macroscopic level—even if chaotic systems can shorten that gap---... quantum action either still requires that God know future states of free (indeterminate) events, whether quantum or human, in order to act appropriately from the past, or will re-introduce a nuanced form of interventionism."<sup>24</sup> The time-gap between quantum level and the level of human actions makes it hard to understand how a God who is limited to quantum events in order to influence the natural world can respond to human actions. Such a notion can only be maintained when it is assumed that God is completely unrestricted by time, so that what would be God's foreknowledge from the point of view of our framework would actually be knowledge about the past for God. This, in turn, raises the complicated question of how God can know something as determined which is still open in its outcome – in other words it seems that the price to be paid is to see freedom as an illusion and determination as reality. A price few would be prepared to pay.

With Tim Sansbury, one may fear that in the quantum model of divine action "the interventionism problem is exchanged for the probability that divine actions will often fail to produce their desired effect, sometimes improperly anticipate future states, and quite possibly entirely fail to emerge at the macroscopic level because of exterior influences."<sup>25</sup> Even more

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<sup>22</sup> R.J. Russell. "Special Providence and Genetic Mutation: A New Defense of Theistic Evolution," in: *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, ed. R.J. Russell, William R. Stoeger, S.J., and Francisco Ayala (Vatican City State: Vatican Observatory Publications; Berkeley: Center for Theology and the Natural Sciences, 1998). 203. On the positive appeal of quantum models of divine action, see also Southgate, 261.

<sup>23</sup> Tim Sansbury. *The False Promise of Quantum Physics*. Zygon: Journal of Religion and Science, forthcoming.

<sup>24</sup> Sansbury, 2.

<sup>25</sup> Sansbury, 11f.

comprehensive is Nicholas Saunders who in his study *Divine Action and Modern Science* reaches the conclusion,

that on our current understanding of the theory SDA [special divine action] is not supported by quantum mechanics in any of its forms<sup>26</sup>

and,

that neither of the two major approaches to the issue in contemporary theology and science, namely the quantum- and chaos-based approaches, survives detailed scientific and theological scrutiny. In this light the conclusion reached is that the ‘current state of the art’ in this field constitutes little more than a number of bold metaphysical assertions such as that of whole/part causation and accordingly there is very little detailed contemporary support for SDA.<sup>27</sup>

These proposals are all more or less focused on the question of where the appropriate gaps or causal joints for divine input can be located. There are alternative models that focus on other things. Theologians like Sallie McFague who sees the world as God’s body develop concepts of divine action that are analogous to the mind-body relationship. Process theologians (John Cobb, John Haught) put an emphasis on God acting by luring the world toward its best possible future. Doing this, they do not neglect past causes. Yet, they maintain that spontaneous, intrinsic novelty occurs in this process.<sup>28</sup>

In a recent article on divine action, Philip Clayton focuses on the concept of cause rather than looking for gaps. Instead of looking at quantum physics he seeks his inspiration from references to mind-body processes. He argues that we need a new theory of causation. Far from advocating a dualism between natural and divine causation he holds that, “nonetheless, not all causes are physical causes.”<sup>29</sup> His key word is emergence. Emergence occurs in the natural world on various levels, such as in the transition from quantum physics to macrophysical systems and chemistry, from chemistry to complex biological organisms and ecosystems, from brain and the central nervous system to phenomena of consciousness or mind, and from nature to spirit.<sup>30</sup> Emergence is a result of observation, not the imposition of a metaphysical principle.<sup>31</sup> Therefore it qualifies well, according to Clayton, to broaden our concept of causality and thus help us to develop a more adequate notion of divine action. Rather than focusing on quantum entanglement, Clayton turns his attention toward psychic entanglement: the task is to demonstrate “that mental phenomena can have ‘downward’ causal effects on the body and the world”.<sup>32</sup> If such downward mental causation is a viable notion, then, Clayton concludes, it is scientifically acceptable to speak of divine causality “as a form of causal influence that prepares and persuades.”<sup>33</sup> No doubt, this approach is indebted to process philosophy. The result is an ambiguous openness: “The eye of faith may see final causality—ultimate purposes that pull the whole process toward its final telos—but scientific biology can neither confirm or [sic] deny such claims.”<sup>34</sup> Over against quantum level divine action Clayton’s suggestion has the advantage of not putting all eggs in just one basket. He understands himself to have support from various levels of order in the natural world: “Resources for the new approach can be found, inter alia, in entanglement phenomena in quantum mechanics, mental causes in psychology, information theory and epigenesis in biology,

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<sup>26</sup> Nicholas Saunders. 2002. *Divine Action and Modern Science*. Cambridge: Cambridge University Press, xvi.

<sup>27</sup> Nicholas Saunders. 2002. *Divine Action and Modern Science*. Cambridge: Cambridge University Press. xvii.

<sup>28</sup> For a short survey see R.J. Russell and Kirk Wegter-McNelly. “Natural Law and Divine Action” in: Ted Peters and Gaymon Bennett, eds. 2003. *Bridging Science and Religion*. Minneapolis: Fortress Press. 49-68, esp. 52-55.

<sup>29</sup> P. Clayton. 2004. *Natural Law and Divine Causation: The Search for an Expanded Theory of Causation*. Zygon 39: 615-636. 619.

<sup>30</sup> Clayton 2004, 620.

<sup>31</sup> Clayton 2004, 622.

<sup>32</sup> Clayton 2004, 625.

<sup>33</sup> Clayton 2004, 628.

<sup>34</sup> Clayton 2004, 630.

and the structure of emergence that appears again and again as one climbs the ladder of complexity in the natural world.”<sup>35</sup> Theologically speaking, this approach leads to an updated version of divine providence – one “without the omnipotence and predestination that often undergirded this doctrine”<sup>36</sup> – in other words, one that is very close to process theology.

It may well be that we see a development toward the use of models that look to analogies between mind/psyche and body, thus echoing the statement by Paul Bloom that I quoted initially.

So far the discussion of various approaches. We can see quite clearly that there is no one single solution to the problem we identified. Discussion is ongoing.

### **Theological reflections**

The question of God’s action is closely linked to the question “What kind of God are you talking about?” I already mentioned that Newton understood God primarily in terms of omnipotence and omnipresence. Newton’s God is the holder of ultimate power, the one who determined the initial conditions of the universe from which the universe could develop its lawlike behavior. This God started the clock and watched over the proper performance of its mechanism, intervening and correcting it, if necessary.

It did not take long, however, before this concept of divine action was fiercely critiqued. The philosopher Gottfried Wilhelm Leibniz argued in the early 18<sup>th</sup> century that Newton’s God must be an awfully poor clockmaker since this God constantly needs to intervene and correct nature. Wouldn’t a perfect God create nature in a way that makes frequent interventions unnecessary? Indeed, it seems that Newton’s focus on God’s omnipotence is a theological trap. Leibniz focuses on wisdom instead as God’s foremost attribute. In infinite wisdom, God, from the beginning, put into motion the interplay of the natural forces, according to a most beautiful pre-established order, so that any interventions by God are not mandated by a nature needing correction, but rather need to be understood solely as acts of God’s free mercy.

The counterargument is, of course, that it is not a diminution, but the true glory of divine workmanship, that nothing is done without God’s continual government and inspection.<sup>37</sup> The difference between divine action as necessary or as an act of grace is linked to different understandings of who and how God is. A God who is first and foremost the omnipotent ruler seems in need of showing greatness by necessary intervention. A God whose first and foremost quality is wisdom, is known by the beauty of pre-established harmony that leaves room for God’s action as an outflow of the free exuberance of divine grace.

Let me conclude by pointing to some specific resources that I see in the Lutheran tradition that will help us to keep the dialogue with science alive – on divine action as well as other topics.

A positive appreciation of the natural world is part of Lutheran tradition. First: We should enjoy the natural world as a gift, as Luther is said to have done with great pleasure. A look at the explanations of the first article of the creed in the Small and the Large Catechism tells us that we should regard as a gift not only nature as such, but also our knowledge about nature (science) and the technology we have developed (although in a critical manner, not naively, since it all works within the framework of *simul iustus et peccator*).

Second: God is not known to us primarily in terms of divine action but in terms of trust. Our relation to God is not built upon understanding how divine action works but on the answer to the question: in whom do you trust the most. This, of course, does not rule out our desire to understand how God acts, but the focus is a love-relationship with God. That is the difference

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<sup>35</sup> Clayton 2004, 631.

<sup>36</sup> Clayton 2004, 633.

<sup>37</sup> Alexander, 14 C I, sect. 4.

between faith understood as *fides*, belief, and as *fiducia*, as trust. In other words, it is about God for us, not about an abstract theism, but about soteriology – God who calls me, you and the world toward fulfillment.

Third: The Lutheran tradition is gifted with a high appreciation of intellectual capabilities combined with a sense of mystery. This is a very good combination for seeking literacy, both in faith matters and in science matters. I see it as a legacy that should challenge scientists to indeed be Sunday Scientists, and the church to be science- and scientist-friendly.

Fourth and finally: the Lutheran formula that tries to put words on the presence of Christ in the Eucharist applies quite well also to the notion of divine action. As we can think of Christ being present “in, with and under” bread and wine, so we can imagine God acting in, with and under or through the natural order of our world.<sup>38</sup> The “in, with and through” provides an open answer, in the light of which we can live with confidence facing unresolved issues and diligently and daringly exploring ‘the wonders that astound us and the truths that still confound us.’<sup>39</sup>

### Suggestions for further reading

Clayton, Philip. 1997. *God and Contemporary Science*. Edinburgh: Edinburgh Academic Press.

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Jackelén, Antje. *The Power of Genes and Molecules: On the Relevance of Science for the Liturgical Language of the Church*. In: *The Gift of Grace: The Future of Lutheran Theology* (Minneapolis: Augsburg Fortress, 2004).

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<sup>38</sup> Solid Declaration, Art. VII (Book of Concord. Kolb/Wengert 599.38): *in pane, sub pane, cum pane*; cf. Solid Declaration, Art. VIII (624.46): Christ’s work in, with and through both natures.

<sup>39</sup> LBW 563.3 (For the Fruit of All Creation).

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Zygon. 35:3 (2000) [This issue has a number of essays on Divine Action.]