**EXPANDED REASON AWARDS**

**– Explanatory Document –**

**Submitted work:**

**– Monograph –**

**“Reframing Providence:**

**New Perspectives from Aquinas on the Divine Action Debate”**

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**by**

**Dr Simon Maria Kopf (Oxon)**
**Associate Professor**
**for Fundamental Theology**
**ITI Catholic University**
**s.kopf@iti.ac.at**

**Summary**

The doctrine of providence, which states that God guides his creation, has been widely conceived in action terms in recent theological scholarship. A telling example is the so-called divine action debate, which is largely based on two principles: (i) providence is best conceptualised in terms of divine action; and (ii) divine action is best modelled on human action. By examining this debate, and especially the Divine Action Project (1988-2003), which led to the 'scientific turn' of the debate, this study argues that theo-physical incompatibilism, as a corollary of this 'framing' of providence, can be identified as the main reason for the current deadlock in divine action theories—namely, the assumption that just as human (libertarian) free action presupposes causal indeterminism, so, too, does divine action in the world presuppose causal indeterminism.

Instead of recalibrating the much-discussed non-interventionist objective divine action (NIODA) approaches, Simon Maria Kopf advocates a 'reframing' of providence in terms of the virtue of prudence. To this end, this book examines the 'prudential-ordinative' theory of Thomas Aquinas and contrasts it with the prevalent 'actionistic', or action-based, model of providence. In this process, Kopf discusses, among other topics, the doctrine of divine transcendence, primary and secondary causation, natural necessity and contingency, and teleology as essential features of this 'prudential-ordinative' theory. The final part of the book addresses how these two approaches fare when applied to the question of biological evolution, which includes the revisiting of the controversy between Stephen Jay Gould and Simon Conway Morris over what would happen if one were to rerun the tape of life.

The submitted monograph

- proposes rethinking the doctrine of providence and argues for the claim that divine providence may be conceptualised in terms of the virtue of prudence, instead of simply modelling it on (human and divine) action
- reviews the divine action debate and advocates a shift in framework, arguing that the current standard model, NIODA, falls short due to its competitive conceptualisation of divine and natural causation
- reinstalls the topic of teleology by revisiting Aquinas's theory of appetency, suggesting that natural contingency neither limits nor provides a necessary locus for providence, but should rather be viewed as an effect of divine providence and a causal mode of its execution

- revisits the evolutionary contingency debate between Stephen Jay Gould and Simon Conway Morris about what would happen if one were to rerun the tape of life

**Endorsements**

Alister McGrath, *Andreas Idreos Professor Emeritus of Science and Religion and Former Director of the Ian Ramsey Centre for Science and Religion, University of Oxford*

This book "represents an original and significant contribution to the discussion about the nature of divine action, […] an original and impressive exposition of Thomas Aquinas's doctrine of providence […] and its application to contemporary debates about divine action arising from the extended 'Divine Action Project' (1988-2003), […] offering a highly perceptive and thorough critique of the 'NIODA' (Non-Interventionist Objective Action) position […]. Having established the nature of the problem at the heart of NIODA, [Simon Maria] Kopf moves into an extended discussion of the 'sapiential-ordinative' notion of providence found in Aquinas, exploring its fundamental themes, and its implications for the role of contingency and the nature of teleology. […] Kopf offered a robust and persuasive defence of his position, displaying a highly impressive knowledge of the literature and debates in the field […, which] left [me] in no doubt […] of the potential of his approach to inject a new intellectual momentum into a debate that is clearly in need of direction."

Bruno Niederbacher, *Associate Professor of Philosophy, University of Innbruck*

"I have read the work with pleasure and great profit. It is compellingly written. This is the result of a skilful guidance of the reader and the train of thoughts, the concise introductions, precise explanations and summaries at the end, as well as the skilful dialectics of the structure of the work. The author always has the goal in mind and does not get lost in sideshows. He shows himself well-versed both in the field of Thomistic philosophy and theology as well as in the field of contemporary analytical philosophy. He uses this knowledge to find a way out of the deadlocks of the Divine Action Debate and the Divine Action Project in a systematic way. The language is precise, simple, clear. Quotations are used sensibly. A great achievement! A book that will delight readers interested in Thomas Aquinas and the substantive issues discussed here."

**Expanding Human Reason – Or: How (Not) to Incorporate Scientific Findings**

In this Explanatory Document I will show how my work addresses Expanded Reason Questions. I will do so by first examining three questions in turn: (1) the anthropological question, (2) the question of meaning, and finally (3) the question of the synthesis of knowledge as expanded reason. I will then move on to elaborate in more detail (4) how in answering these questions my submitted work expands human reason.

## 1. The Anthropological Question – Or: Can God Will Human Beings to Evolve Contingently?

A classical anthropological question is: Who is man? Similarly, a traditional question in theological anthropology is: Who is man before God? Finally, an anthropological question that arises in the context of a science and theology dialogue is: Who is man in the light of biological evolution? Can we still assume that humans were made in the image and likeness of God; that God intended, willed, and wanted human beings, both individually and as a species? The main stumbling block in answering these latter questions, as we will see in the next section in more detail, is the nature and role of contingency—often also expressed in terms of chance events in biological evolution.

In this book I show that two prominent positions have hitherto been taken in the contemporary debate on the relation of providence to contingencies in nature. On one theologically contested view, natural contingency *limits* divine providence (see section 2). On another view, which I contest in the book, natural contingency provides a *locus* for divine providence (see section 3).

As an example of the first position, consider *Chance and Necessity*. In this international best seller, the French biologist and Nobel laureate Jacques Monod (1970, p. 50) sets out to argue that humanity cannot be ‘ordained from all eternity’ because scientific evidence shows that chance is a driving force in the natural processes by which humanity evolved. Monod justifies his conclusion about biological evolution by the role contingency plays in modern biology. According to Monod, chance is the only source of biological innovation and, together with necessity, determines the course of evolution. ‘Pure chance, absolutely free but blind’, Monod (1970, p. 110) asserts, makes humanity merely ‘the product of a vast lottery’ (Monod, 1970, p. 131). The biologist concludes his prominent case from contingency against the notion of providence by stating that

> [t]he ancient covenant is in pieces; man at last knows that he is alone in … the universe, out of which he emerged only by chance. Neither his destiny nor his duty have been written down. (Monod, 1970, p. 167)

In this or similar ways, advocates of the first position claim that contingency severely challenges the traditional doctrine of providence: 'experimental results which point to the pervasiveness of chance in the evolutionary process' purportedly show that 'from within a worldview that takes science seriously, divine providence, the notion that God causes and preordains all things from all eternity, is unintelligible' (Austriaco, 2003, p. 948). The underlying idea is that to the extent to which contingency accounts for natural processes, divine providence is undermined.

As an example of the second position, consider *Chance and Providence*. In this work William Pollard (1958, p. 92) replies to those who 'have argued against the reality of divine providence on the basis of explaining the course of events as the result of chance' that the reality of chance in no way amounts to a denial of providence; rather, it is the prerequisite of providence. On Pollard's account, then, chance and accident, as two sources of indeterminism, provide a loophole for God's providential activity in the world. In these indeterminacies of nature God finds 'room to operate in specific and concrete situations' (Pollard, 1958, p. 30). By the same token, Pollard turns causal determinism into a hard problem and real challenge for providence. Hence, the objection against providence from contingency was supposedly met in replying that God acts in the indeterminacies of this world.

This book argues that both outlined positions, namely the theologically contested view that natural contingency *limits* providence as well as the broadly accepted and endorsed view that natural contingency provides a *locus* for providence, agree at least on this, that natural causation is incompatible with certain forms of divine causation. Divine and natural causation are taken as mutually exclusive, either because contingencies resulting from accidental natural causes fall outside the scope of God's directing action or because contingencies stemming from a purported lack of natural causation constitute the space for God's special action. This shared view is, however, theologically deeply problematic, for reasons that I shall outline below.

To remedy this unfortunate situation, then, this book offers a new perspective. In contrast to the outlined and contrary theses that contingency *limits* providence or that it provides a *locus* for providence, I show that natural contingency is rather an *effect* of providence and a causal mode of its execution; contingent secondary causes are therefore *executors* of providence. I do so by drawing on the doctrine of providence proposed by Thomas Aquinas, which I present in a novel

way in the book, drawing on the human virtue of prudence and embedding it in the classical doctrine of God.

## 2. The Question of Meaning – Or: Why both the 'Gospel of Contingency' and the 'Gospel of Inevitability' are Wrongheaded

Austrian neurologist Sigmund Freud spoke of three wounding blows to human narcissism: (1) the Copernican revolution showing us that we are not the centre of the universe; (2) biological evolution showing us that we have in fact evolved from the animal kingdom; and (3) psychoanalysis showing us that we are not even the masters in our own house.

The second Freudian wounding blow, which my book addresses in detail, questions not only the common view that we are the pinnacle of the living world but also, and more importantly, the Christian view that God intended, willed, and wanted us, both individually and as a species. To address this latter issue, I discuss in my book in detail a famous controversy between palaeontologists Stephen Jay Gould and Simon Conway Morris about what would happen if one were to rerun the tape of life. This debate, ostensibly about the interpretation of fossils, has implications for the probability of the emergence of human life. In this book I show that this controversy about the directionality of biological evolution, including especially the worldview-related implications drawn from it, threatens to lock the Christian worldview and in particular the doctrine of providence unwarrantedly into the constraints of science.

Let me explain why. The disagreement in this debate concerns the significance of contingency for the course of biological evolution. On the one hand, Gould argues that the scientific evidence of the reappraisal of the fossils of the Burgess Shale – one of the most important *Lagerstätten* in British Columbia, Canada – calls for a radically new view of life and evolution. The conclusion he draws is that the evolution of human life is utterly contingent and that no directionality is inherent in biological evolution. Conway Morris, on the other hand, retorts that the inferences Gould draws are mistaken. According to Conway Morris (2003, p. xii), the evolution of human life is rather inevitable due to the phenomenon of evolutionary convergence, being defined as 'the recurrent tendency of biological organization to arrive at the same "solution" to a particular "need"'. Life, as it were, comes up with similar solutions to a problem. For example, sabre-toothed cats and sabre-toothed tigers are well separated in evolutionary history but have very similar large canines extending from the mouth. Hence, while Gould claims that rerunning the tape of life would most certainly result in a world absent

of the human species, Conway Morris counters that biological properties such as human intelligence are an evolutionary inevitability.

But why should this scientific controversy be of relevance to theology? And how is it related, one might ask more specifically, to the doctrine of providence, which is the main subject of my book? One of the reasons why Gould highlights the role of contingency in the history of life is to demonstrate the improbability of the evolution of humans. In fact, he takes his proposal to be another Freudian wounding blow to human narcissism; the new emphasis on contingency in life's history is intended to shatter our conventional self-understanding. Here is Gould (1989, p. 44):

> We cannot bear the central implication of this brave new world. If humanity arose just yesterday as a small twig on one branch of a flourishing tree, then life may not, in any genuine sense, exist for us or because of us. Perhaps we are only an afterthought, a kind of cosmic accident, just one bauble on the Christmas tree of evolution.

According to Gould, we are left with two options: either to accept that we are an unintended product of history or to close our eyes to the apparent fact that life is a mere product of chance. Assuming that purpose and contingency are in stark contrast, Gould denounces the view that human life is anything other than a product of chance as distorted because, from a scientific point of view, the history of life is a history of decimation by lottery.

Therefore, Gould (1989, p. 288) rejects a view of 'life's history as the fulfilment of a divine purpose', a phrase, incidentally, that shows the way in which he conflates or even identifies evolutionary directionality with God's providential care. He states:

> If the history of life shows God's direct benevolence in its ordered march to human consciousness, then decimation by lottery, with a hundred thousand possible outcomes (and so very few leading to any species with self-conscious intelligence), cannot be an option for the fossil record. (Gould, 1989, p. 262)

What Gould is effectively describing here is the common view that belief in providence, usually understood as God's guidance of the evolutionary process, amounts to a belief in predictable progress. If providence is equated with the two pillars of the conventional view, predictability and progress, then one might arrive at the conclusion that to the extent to which evolution is predictable and progressive, God may be acting in evolution. But if it turns out that evolution is a contingent, unpredictable, and nonprogressive process, then the concept of providence needs to be abandoned.

Addressing his worldview-related agenda, Nobel laureate Christian de Duve (1996, p. 771) dubbed Gould's thesis 'the gospel of contingency'. By this he means that in Gould's writings contingency becomes something like a 'creed' Gould spreads to uproot the Christian belief that the evolution of humankind 'reflects some kind of directionality in biological evolution' (de Duve, 1996, p. 771). Indeed, to convey the origin of human life as a random process, Gould (2011, pp. 149-151) compares the evolution of life to a drunkard's walk: evolution lacking directionality, intentionality, and purpose is stumbling through history like a drunk through the alleys at night.

By contrast, Conway Morris is widely praised for having stood against the Gouldian view of the history of life as utterly contingent and without directionality, thereby securing a theologically acceptable view of the evolution of life. Consider the following statement:

> [T]he constraints of evolution and the ubiquity of convergence make the emergence of something like ourselves a near-inevitability. Contrary to received wisdom and the prevailing ethos of despair, the contingencies of biological history will make no long-term difference to the outcome. (Conway Morris, 2003, p. 328)

Humans are not a random accident but rather an inevitable product of the evolutionary history. In contrast to de Duve's 'gospel of contingency' label, Eörs Szathmáry (2002, p. 779) terms positions stressing the inevitability of human life 'the gospel of inevitability'.

In light of this discussion, the question arises as to why and in what sense providence is supposed to entail the necessity or inevitability of evolutionary outcomes such as human life. The resonance of the opposed claims of the gospel of contingency and the gospel of inevitability in the reception of the debate is indicative of a deep discomfort among many Christians that a lack of directionality in evolution might render obsolete the doctrine of providence – that scientific directionality and divine purpose are inextricably linked. In other words, God's guidance of evolution seems to imply, and any reasonable account to rest essentially upon, a nearly inevitable evolutionary directionality towards a set end, in particular the emergence of the human species.

About this theological challenge philosopher of biology Michael Ruse (2016, p. 312) writes the following illuminating comment, a brief analysis of which can show how I aim to reframe the debate:

> [F]or the Christian, human beings are necessary. Their arrival in this universe is not a matter of chance or whim – might have been, might not have been. We cannot paint

> God as an aspiring parent, trying desperately to have kids but with no firm guarantees. If God wanted to have kids, God was going to have kids. And here's the rub: evolution through natural selection makes all this very problematic.

In this quote Ruse posits for theological reasons – in line with the reasoning seen above – what he calls the 'necessity of humankind' (Ruse, 2016, p. 323), as a consequence of his rendering of the Christian doctrine of providence: 'human beings are necessary', he says, for '[i]f God wanted to have kids, God was going to have kids'. In other words, if God wills human beings, then human beings will be; or in an evolutionary setting, if God wills human beings, then human beings will evolve. The question then is where the necessity comes in, or what sort of necessity the posited 'necessity of humankind' is. As I show in the book, traditionally two kinds of necessity are distinguished in this context: the necessity of the consequent (*necessitas consequentis*) and the necessity of the consequence (*necessitas consequentiae*).

> Necessity of the consequent: If God wills *p*, then necessarily *p* ([God wills $p \rightarrow \Box p$]).
>
> Necessity of the consequence: Necessarily, if God wills *p*, then *p* ($\Box$[God wills $p \rightarrow p$]).

In the first case, the necessity attaches to the consequent ('*p*'). What is necessary in this instance is, to stick with the example from above, the evolution of human beings: if God wills human beings, then human beings will evolve necessarily; that is, they will evolve in a necessary or inevitable manner. In the latter case, however, the necessity attaches to the consequence ('if God wills *p*, then *p*'). What is necessary in this instance is not the evolution of human beings as such, but rather that *if* God wills human beings, *then* human beings will evolve: necessarily, if God wills human beings, then human beings will evolve. Importantly, the necessity of the consequence as such says here nothing about the causal modality of the consequent, that is to say, whether it is contingent or necessary. Rather, the necessity is here a conditional necessity, which, as I argue in detail in the book when elaborating on the doctrine of providence in Thomas Aquinas, is compatible with the contingency of the consequent. Consequently, the necessity of the consequence as such does not entail the necessity of the consequent.

On the basis of this classical distinction, I suggest in the book that the evolutionary contingency debate matters for, and has a direct impact on, the doctrine of providence if and only if one assumes providence to imply a necessity of the consequent. For only then would the inevitability of the evolution of human beings, or the evolving of humans in a necessary manner, be allegedly implied by providence. Otherwise, the necessity attaches to the conditional, not to the specific effect of God's will, wherefore the emergence of the human species might take

place either contingently or necessarily. Put differently, if the fact that necessarily, if God wills human beings, then human beings will evolve (□[God wills $p \rightarrow p$]), does not entail that human beings evolve necessarily (□$p$), or inevitably, as opposed to contingently, then it would seem reasonable to conclude that positions demanding the necessity or inevitability of the evolution of humans for theological reasons, that is, positing it as a consequence of the doctrine of providence, presuppose that providence entails the necessity of the consequent (God wills $p \rightarrow$ □$p$). This is notably the case whether they then affirm or deny this inevitability, the necessity of the consequent.

As I show in the book, surprisingly, despite their opposite assessment of the significance of evolutionary contingency, both the gospel of contingency and the gospel of inevitability agree on the presupposition that a providential view demands evolution to be directed, or substantially constrained, towards the emergence of specific traits rendering humans a necessity or at least a near-inevitability. This means that to the extent that they concern themselves with the inevitability or near-inevitability of the emergence of human beings, and insofar as they use this in support of or against the doctrine of providence or the Christian view of life more generally, the necessity associated with providence is a necessity of the consequent. Put differently, if the evolution of human beings needs to be necessary or inevitable – or at least nearly inevitable, for that matter – in order to meet the theological demands, then the necessity of providence is regarded as a necessity of the consequent; for only a necessity of the consequent attaches to and specifies the consequent, that human beings will evolve necessarily, inevitably, or most likely.

What is theologically questionable about such proposals, as I show in the book, is the assumption that the Christian doctrine of divine providence requires a directionality of evolution that science can describe; that providence implies a necessity of the consequent; and that God's willing *p* necessitates *p*. The outlined evolutionary contingency debate is thus of interest to theology not so much because evolutionary directionality is a condition of the possibility of providence and the Christian worldview, properly understood, but rather because divine providence should in fact not be taken to be identical with directionality in evolution. In other words, the theological doctrine of divine providence does not, or not necessarily, imply the absolute necessity of the consequent.

By way of conclusion, then, we can say that natural contingency might *limit* a *secularised* version of providence, namely evolutionary directionality. By contrast, if divine providence and evolutionary directionality are distinct, it is not apparent why contingency should limit *divine*

providence. So, a thorough theological analysis of the debate and its philosophical implications shows that the understanding of providence underlying this debate needs to be subjected to theological criticism, since it locks providence into unwarranted scientific constraints. Only if one takes providence to mean evolutionary directionality and imply the absolute necessity of the consequent can the scientific contingency-versus-directionality debate between Gould and Conway Morris directly negate or resolve the question of God's providential guidance of biological evolution. Otherwise, the doctrine of providence will neither rest on, nor restrict providence to, a directionality of evolution from a scientific point of view. To show all this, then, my book argues in great detail why the traditional doctrine of providence entails only the necessity of the consequence but by no means a necessity of the consequent.

## 3. The Synthesis of Knowledge as Expanded Reason – Or: Can We Reasonably Conduct a Dialogue between Theology and the Sciences without Philosophy?

One way of expanding human reason is by bringing theology into conversation with the sciences. The mediating discipline of this interdisciplinary dialogue, I would argue, needs to be philosophy. The submitted work exemplifies how such a dialogue could look like, as I will start to outline in the next section, but also how not to conduct it, which is the subject of this section. A much noted but ultimately flawed attempt at bringing into dialogue theology with the sciences is the NIODA ('Non-Interventionist Objective Divine Action') model. This model, which is widely considered to be the current standard account in divine action theories, purports a breakthrough in modelling God's action in the world. In this section I will therefore turn to the second of the two positions outlined above, that contingency provides a *locus* for divine action, to indicate what went wrong in their incorporation of scientific findings. The main difficulty with the NIODA approach is, as we shall see, that problems in the philosophical mediation as well as in the theological reflection on, and appropriation of, the incorporated insights have been overlooked. The outcome is a theory that is both philosophically and theologically wanting, in addition to facing scientific difficulties.

Many scholars within the field of science and theology assume that theology requires some kind of gaps in the causal nexus to affirm God's activity in the world. For this reason, representatives of this view appeal to the purported causal indeterminism of natural processes and exploit various scientific theories, including quantum physics, chaos theory, and top-down causation, that interpret nature as at least partially indeterministic. But this approach exploiting apparent

indeterminacies in the causal nexus of nature, as shown by new developments in the sciences, does not work, I argue, for (a) scientific, (b) philosophical, and (c) theological reasons.

(a) Scientific Problems

To exemplify how not to use the sciences for theological purposes, let us look more closely at so-called Quantum Divine Action (QDA) purporting that we can insert divine action into the indeterminacies provided by quantum physics. But what QDA theorists exploit is not so much an indeterministic theory of quantum physics as a hybrid interpretation neither accepted by adherers of indeterministic interpretations nor their scientific opponents. In other words, QDA does not sit well with the very interpretation of quantum mechanics to which their proponents appeal because it merges elements specific to an indeterministic and deterministic interpretation of quantum mechanics, respectively (Dodds, 2012, pp. 144-147).

> (1) There are no natural determining causes for quantum events (inference from an *indeterministic* interpretation of quantum mechanics).
>
> (2) Determining causes are suitable for quantum events (inference from a *deterministic* interpretation of quantum mechanics).

By appealing to these two tenets of opposed interpretations of quantum physics, QDA theorists simultaneously ignore two further essential beliefs, namely that (1) in the case of indeterministic quantum theories *no* natural determining causes are needed, and (2) in the case of deterministic quantum theories what is needed are *natural* determining causes. On this basis they then conclude:

> (3) Since no natural determining causes are available, God might determine quantum events as a divine determining cause (fusion and reinterpretation of both the indeterministic *and* the deterministic interpretation).

The conclusion QDA theorists reach is neither in accord with an indeterministic interpretation of quantum mechanics nor with a deterministic alternative. Rather, QDA is a fusion of these interpretations partially accepting some while simultaneously rejecting others of their tenets: *pace* indeterministic, and in accordance with deterministic interpretations, QDA searches for a determining cause; *pace* deterministic, and in accordance with indeterministic interpretations, QDA then asserts that there are no natural determining causes for quantum events. Based on this twofold eclectic move, QDA finally goes at least beyond, if not contrary to, both theories by introducing a divine cause to determine the outcome of quantum measurements. Adherents

of an indeterministic interpretation would, therefore, be puzzled by the postulate of a divine *cause* for quantum events, for on their account no cause is needed at all; and their deterministic opponents would be struck by the postulate of a *divine* cause, for on their account what is needed is a natural cause (Dodds, 2012, p. 145).

(b) Philosophical Problems

The point is that indeterministic quantum theories operate precisely on the assumption that there is no determining causality, and indeed no such causality is needed. The physicist William Stoeger (2000, pp. 242-243 fn. 4; my emphasis) aptly expresses the idea:

> Some […] consider the indeterminacy at the quantum level to be an essential gap which requires filling …. [However,] indeterminacy is not a gap in this sense, but rather an expression of the fundamentally different physical character of reality at the quantum level. *It does not need to be filled!* To do so, particularly with divine intervention, would lead … to unresolvable scientific and theological problems. *The demand for a cause to determine* the exact position and time of an event *misconstrues the nature of the reality* being revealed. Quantum events need a cause and have a cause, but not a cause *determining* [!] their exact time and position of occurrence, beyond what is specified by quantum probability (the wave function).

The NIODA theorists' conclusion that indeterministic systems lack causation essentially rests – and this might at first sound rather paradoxical – on a deterministic understanding of causation. Ignacio Silva (2015, p. 105) has convincingly argued in line with, and further explicating, Stoeger's statement that the way NIODA theorists describe causal *in*determinism remains essentially deterministic. Their definition of 'cause' goes something like this: a cause is that which determines the outcome of an event. This understanding is 'deterministic' to the extent to which causality is taken essentially to entail determination (what Stoeger calls a 'determining cause'), and as such, the two concepts of determination and causation merge to a considerable extent. Only on such an understanding of causation can causal indeterminism be regarded as a 'lack of causality', for indeterminism does indeed lack *determining* causality. But rather than interpreting causal indeterminism as non-*deterministic* causation, as Stoeger insists in the citation, NIODA theorists view indeterministic processes, such as quantum measurements, as non-*causal* events claiming that quantum events lack causation and thus provide causal gaps.

These causal gaps and the lack of causality disappear, however, as soon as one drops the deterministic understanding of causation and operates instead with an indeterministic notion of causation. Then one simply deals with non-*deterministic* causation, but not a lack of causation: indeterminism lacks determination not causation. Non-causal events disappear, consequently, and no insufficient natural causation remains inherent to indeterministic systems. On an indeterministic account, then, the openness of indeterministic systems consists in the *in*-determination of its outcome, but this does not imply a-causation, that is, a lack of causation in the sense that one can, let alone must, insert a cause to overcome the *in*-determination.

(c) Theological Problems

There is yet another, and this time genuinely theological, difficulty with the NIODA model. As mentioned above, the NIODA approach implicitly assumes a contrastive and competitive picture, according to which there can be competition between God and creatures in their activity, namely that natural causation and NIODA mutually exclude each other in a zero-sum perspective. This is the result of a univocal concept of action operating in NIODA models. 'Univocal causation' means that a cause may operate with another cause of the same order to bring about an effect. Only if one assumes divine and natural causes to be univocal causes can they possibly interfere with each other. Hence, the very fact that advocates of NIODA seek to avoid interventionism ('non-interventionist' objective divine action) bespeaks a univocal understanding of divine and creaturely causation, that is, rendering divine and creaturely causes univocal causes. Dodds (2012, p. 137, my emphasis) explains:

> The desire to avoid such interference of course *presupposes that such interference is possible* – that the creator might act in such a way as to interfere with the very world he has created. *Such causal interference is possible, however, only between univocal causes*. It seems then that lurking somewhere behind this mode of discussing divine action there must be a univocal understanding of divine causality.

The point Dodds makes here is that *only* univocal causes, causes of the same order, can compete with each other. Consequently, if God and nature are *not* univocal causes, they cannot possibly be mutually exclusive. NIODA models therefore presupposes that God is a univocal cause.

Univocal causes can cooperate in bringing about an effect. If they do so, however, they only partly cause the effect, and necessarily interfere with other causes operating in the same causal order. The ratio of univocal causality is disproportional: the more one univocal cause causes, the less other causes contribute to some effect. In the case of a transcendent cause, by contrast,

the purported competition between the causes disappears. A transcendent cause is a cause operating with a cause of a different order to bring about an effect. As such, the two causes both wholly, not partially, cause the same effect, despite there being another effective cause. The question that arises from a theological point of view is: which kind of causality – univocal or transcendent – is more suited to the divine nature?

To give an illustrative example. Imagine a basket full of apples and oranges. Both fruits naturally compete for available space. The more apples you put in, the less room there is for oranges, and vice versa. But this cannot reasonably be the case with God's presence. It is not as if the apples must be removed to make room for God, but rather the apples are there because of God's presence. God is not one factor alongside creatures such as apples and oranges (McCabe, 2007, pp. 73-74).

Similarly, it would appear that divine and creaturely activity cannot reasonably be presented in such a zero-sum perspective either, due to the nature of God. Yet this is precisely what NIODA implies, that creaturely causality has to be causally limited, removed like apples to make room for oranges, to clear space for NIODA. In their respective causality, God and creatures are thus like two men pulling a boat. The more one pulls, the less work is left to the other. Only if the first one is an insufficient cause for the boat's movement is there an opportunity for the second one to step in causally. On this view, God and creature can jointly yet partially cause an effect, but no effect can be wholly caused by both God and creatures. Hence, according to NIODA models, when God acts specially and objectively, his action is regarded as a univocal cause.

One reason why theologians might want to resist a univocal application of action in the human realm to God might be the utter difference between God and creatures. If God is the creator, how can their respective actions resemble each other to the extent that both creaturely and divine action are incompatible with causal determinism, if the latter is theologically to be considered an effect of creation: without God's creation and conservation there would be no natural causation and hence no causal determinism. Another objection to approaches rendering God a univocal cause involves arguing that the univocity of action attributed to both God and creature assumes a degree of similarity between God and creature in their being that many theologians would want to avoid. God and creatures are not so alike in their being, or nature, that their action could possibly fall within the same order of causation. Herbert McCabe (2007, p. 76), for instance, asserts that the 'idea that God's causality could interfere … can only arise from an idolatrous notion of God as a very large and powerful creature – a part of the world'. By contrast, if God is unlike creatures, his action must be so too: divine and creaturely action would

then appear non-competitive not in practice, but in principle. On this alternative account, a univocal notion of action is not compatible with the very being and nature of God as the cause of all beings.

The upshot of my critique, then, is this: we cannot simply adopt certain notions from the sciences without adapting and modifying them. The incorporation of scientific insights into theology needs careful philosophical and theological consideration, transformation, and modification. If this is the case, then neither the view that natural contingency *limits* divine providence nor that contingency provides a necessary *locus* for providence will do. An alternative approach is needed – a reframing of the debate.

## 4. Expanding Human Reason by Reframing Providence and the Divine Action Debate – Or: My Answers to the Outlined Questions

The main purpose of this Explanatory Document so far has been to introduce the questions rather than to expound the answers I give in the book. Put differently, the aim has been to show why the questions I address in the book are Expanded Reason Questions. Now I will turn to my answers.

### 0. Introduction

In recent theological scholarship, it has become common to conceive of God's providence in action terms. A telling example is the so-called Divine Action Debate, which is largely based on two principles: (i) providence is best conceptualised in terms of divine action; and (ii) divine action is best modelled on human action. The introduction first indicates that due to principle (ii), the main challenge for this action-based approach has been to find room for God to act in nature, which appears to be fully accounted for by natural causes. More importantly, while problems concerning principle (ii), namely the modelling of divine action on human action, have not gone unnoticed in recent years, principle (i), the exposition of divine providence in terms of divine action, has gained relatively little scholarly attention. The introduction thus outlines how this book challenges the more fundamental assumption that the concept of action best conceptualises divine providence, and advocates a reframing of the doctrine of providence and a notion of providence modelled on the virtue of prudence rather than human action. To this end, this chapter introduces the notion of divine providence as well as two historically relevant approaches to the doctrine of providence that function as central categories for the book's analysis: action-based, or 'actionistic', and prudence-based, or 'prudential-ordinative', providence. The chapter also gives a quick overview of the Divine Action Debate, its current

state, and the nature of the contribution this book seeks to make. The introduction concludes with a brief chapter overview.

### 1. The Divine Action Debate

Chapter 1 serves as an introduction to the Divine Action Debate and establishes its central category, Special Divine Action (SDA). The chapter begins by examining the historical roots of the debate, a critique of the Biblical Theology Movement, and the initial challenge that sparked the controversy. Next, the chapter delineates two extreme positions in between which the debate has unfolded, uniform and universal divine action, and explains the theological push-back on a particular kind of divine action on the basis of what has come to be known as the 'liberal modern worldview'. The chapter finishes by carving out the concept of SDA as a reaction to these two positions.

### 2. The Divine Action Project (1988-2003)

Chapter 2 shows how, within the Divine Action Project (1988-2003), the previously established category of Special Divine Action (SDA) was turned into a new and systematic research programme. First, the chapter outlines the wider theological debate and how the perceived chasm between Protestant Liberalism and Conservatism affected the Divine Action Project. The chapter suggests viewing the non-interventionist objective (special) divine action (NIODA) research programme as an alleged breakthrough between 'liberal' subjective SDA and 'conservative' objective but interventionist SDA, by decoupling objective SDA and divine intervention. Next, the chapter takes a closer look at the notion of intervention and its purported entailment of a violation of the laws of nature. After this critical evaluation of the NIODA framework, the chapter presents the three main NIODA models – part-whole, chaos, and quantum divine action – concluding that all of them face considerable scientific objections.

### 3. The Reason for the Deadlock

It has become a common view in contemporary theological debate to assume that God needs room to act in the world. Chapter 3 argues that this purported need for metaphysical space arises primarily from theo-physical incompatibilism, or the view that Special Divine Action (SDA) in an objective sense is incompatible with causal determinism. First, this chapter introduces the notion of theo-physical incompatibilism, which, it argues, is firstly an import from the philosophy of action and secondly a corollary of an action-based, or 'actionistic', approach to providence: Just as human (libertarian) free action presupposes causal indeterminism, so, too, divine action in the world is assumed to presuppose causal indeterminism. Next, the chapter

shows that theo-physical incompatibilism is not only a core assumption of the NIODA programme examined in Chapter 2, but also among the main reasons for the current deadlock in divine action theories. The chapter then argues that this approach is tantamount to a new, ontologically rendered 'God of the gaps' strategy, which should be avoided for theological, philosophical, and scientific reasons. Finally, the chapter indicates that dropping this presupposition, which is compatible with other forms of incompatibilism, such as libertarianism, may open up new avenues of research.

### 4. Towards a Prudential-Ordinative Understanding of Providence

In the history of the doctrine of providence and its explication, there are at least two major Christian approaches: 'actionistic' and 'prudential-ordinative' providence. In contrast to the prevailing action-based, or 'actionistic', model, this chapter develops a 'prudential-ordinative' understanding of providence, by examining what is arguably the prime exemplification of this approach, Thomas Aquinas' doctrine of providence, which is based on the virtue of prudence, not merely on human action. First, this chapter discusses the virtue of prudence and human providence as an analogy for divine providence. Next, it introduces the distinction between providence and government, as well as that between primary and secondary causation. Finally, the chapter addresses various objections brought forth against 'double agency'. To this end, the chapter distinguishes Austin Farrer's well-known theory of double agency from Aquinas' approach, which, it is argued, is a decisively different account of 'double agency'. Consequently, the objections raised against Farrer's double agency do not *eo ipso* apply to Aquinas' theory of secondary causation. In fact, the chapter shows that the major objections raised in the science and theology debate miss the so-called doctrine of divine application, which is essential to Aquinas' theory of secondary causation and his account of providence.

### 5. Divine Providence, Natural Contingency, and the Doctrine of Transcendence

Aquinas' theory of providence has two major features that are essential for the purpose of establishing a prudential-ordinative view of providence: the doctrine of divine transcendence and natural teleology. Chapter 5 examines the relation of divine providence to natural contingency in Aquinas' account. It argues that divine transcendence is key in understanding the compatibility of divine providence and natural contingency. First, the chapter goes through various meanings of contingency and its relation to providence. Next, the chapter develops what Bernard Lonergan calls 'the doctrine of divine transcendence' in Aquinas, by showing a parallelism between divine intellect, will, and operation. On this basis, the chapter concludes that on Aquinas' account, divine operation is transcendent, universal, and holistic. It also shows

that contrary to the common theses that contingency either *limits* or provides the *locus* of providence, natural contingency should rather be viewed as an *effect* of providence and a causal mode of its execution; contingent secondary causes are therefore *executors* of providence. Finally, the chapter suggests moving beyond theo-physical incompatibilism, by rejecting a zero-sum perspective of divine and natural causation.

### 6. The Teleological Nature of Providence and the Teleological Natures of Creatures

Chapter 6 discusses the notion of teleology and elaborates on the teleological nature of 'prudential-ordinative' providence. First, the chapter revisits the notions of teleology and final causation, it illustrates the modern transformation of teleology, and shows why final causation matters for the doctrine of providence. Next, the chapter defends the view that Aquinas envisions the providential ordering of all creatures through immanent teleology against an inconsistency objection stating that due to the so-called 'cognition condition', Aristotelian teleology is unavailable in Aquinas' account of providence. The chapter argues that this claim can be illustrated by the Scholastic notion of *appetitus*. The chapter then develops at length a theory of appetency, by revisiting the notion of a (natural) appetite, which the chapter renders and explains in terms formal and material natural inclinations. Finally, the chapter shows how God can providentially guide the world through appetites and what role final causes play in his providence.

### 7. Replaying the Tape of Life

What would happen if one were to rerun the tape of life? This question is at the centre of the evolutionary contingency debate between palaeontologists and evolutionary biologists Stephen Jay Gould and Simon Conway Morris, and has been linked with and applied to the doctrine of providence, especially in its application to biological evolution. Chapter 7 examines this debate and the presumed link with the doctrine of providence. First, this chapter outlines the famous evolutionary controversy between Stephen Jay Gould and Simon Conway Morris about the directionality and repeatability of biological evolution, and discusses the role evolutionary contingency plays in their accounts of evolution, at times labelled the 'gospel of contingency' and the 'gospel of inevitability'. Then the chapter presents a critical assessment of some of its implications, including the secularisation of providence, assuming providence to include a necessity of the consequent instead of a necessity of the consequence: but the fact that necessarily, if God wills human beings, then human beings will evolve ($\Box$[God wills $p \rightarrow p$]), does not entail that human beings evolve necessarily ($\Box p$). On a traditional theological account, however, providence include the necessity of the consequence, not the necessity of the

consequent, as the evolutionary contingency debate would suggest. The chapter reaches the conclusion that only according to a secularised notion does God's providence concerning biological evolution equal evolutionary directionality.

### 8. Evaluating the Theological Responses

Chapter 8 evaluates the theological responses to the evolutionary contingency debate outlined in Chapter 7, both from an actionistic and prudential-ordinative perspective, and addresses the question of what form of directionality, if any, divine as opposed to secularised providence implies with regard to biological evolution. The chapter argues that the actionistic (quantum-based) NIODA theory outlined in Chapters 1 to 3 faces further and more specific limitations in the context of biological evolution, and suggests that the prudential-ordinative theory proposed in Chapters 4 to 6 can remedy at least some of these limitations. In particular, the chapter shows how God can providentially guide biological evolution and argues that a (divinely-guided) immanent form of teleology, as employed by the prudential-ordinative theory, is theologically preferable to an externally imposed form of teleology, as utilised by the rival actionistic model. The chapter concludes that while both the actionistic and prudential-ordinative model of providence can in principle incorporate contingency, the prudential-ordinative theory of providence can better accommodate and integrate evolutionary contingency.

### 9. Conclusion

The main purpose of this book is to foster a reframing of the doctrine of providence by reconceptualising the notion of divine providence. The standard view in the Divine Action Debate is premised upon two prominent assumptions: that (i) providence is best conceptualised in terms of divine action; and that (ii) divine action is best modelled on human action. On this common view, then, divine providence is, at its core, a specific form of action God performs in the world. The conclusion shows how by challenging this preoccupation with, and at times exclusive focus on, action terms, this book aims to shift the conversation towards an alternative approach conceiving divine providence not primarily on the basis of human action but instead by analogy with the virtue of prudence and human providence. The conclusion summarises the findings of the book and gives three reasons why reframing the doctrine of providence in this manner is significant for the Divine Action Debate.

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