

The Twin Truths of Divine Immanence and Transcendence: Creation, laws of nature and human freedom

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Abstract. The concepts of divine transcendence and divine immanence are often taken to be antithetical. It seems that the more one is stressed, the greater the difficulty in allowing for the other. But there is no apparent tension between these twin truths in the biblical accounts, and classic Christian tradition has affirmed them both. In order to resolve the felt opposition between divine transcendence and immanence, the biblical Creator-creature pattern has to be taken as the starting-point to understand the God-world relationship. As the transcendent Creator, God is intimately present and active in his creation.

Taking creation as the starting-point is not a fideistic manoeuvre. In fact, fully acknowledging divine transcendence excludes any framework that would include God and the world in the more general context of being. Such an overarching framework would constitute a reality over and above God – a perspective which cannot be accommodated by theism. Instead, we have to learn who God is, and how the world relates to him, from the biblical texts.

The fruitfulness of the concept of creation for science is reflected in the fact that it provides a relevant framework to reconsider certain questions raised by a scientific description of the world: the distinction between science and scientism, reductionism, laws of nature, human freedom and determinism.

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Divine transcendence and immanence conjoined in classic Christian theology

At first glance, divine transcendence and immanence seem to be conflicting truths. Stressing the distinction between God and the world, the radical otherness of the divine, may make it harder to allow for God's active and caring involvement in the world. If we emphasize instead God's intimate presence in nature, his pervading of all that exists, then the pantheistic confusion of the deity and the world lurks round the corner. Notwithstanding, the best of Christian tradition has always firmly held together both truths. It is sufficient for our purposes to mention two representatives of the joint confession of divine immanence and transcendence in the great Christian tradition.

Augustine of Hippo

In the opening prayer of the *Confessions*, Augustine considers the relationship between divine transcendence and immanence. He asks the question: 'Is there any part of me capable of encompassing you? Or is it the case that heaven and earth, which you made, and in which you made me, encompass you?' The answer can only be no, precisely because God is the 'God who made heaven and earth'. Yet, 'I would not exist at all, unless you existed in me. Or rather, I would not exist unless I existed in you, by whom everything is, and through whom everything is, and in whom everything is [Rom 11:36]' (2014: 5). The very fact of being created implies existing in God and being filled

by God's presence. Thus the twin truths of God transcending the world and of God being present in all that exists both flow from creation. It is because God stands over and above the world as its Creator that nothing exists outside Him.

Holding together divine transcendence and immanence is not theological speculation: Augustine reflects on this mystery in the context of prayer. The re-reading of his whole life up to his conversion, which is the topic of the *Confessions*, is rooted in this. God was present at every stage of his journey, secretly directing him towards salvation, in spite of his many detours: 'Even if I go down into Hell, you are there' (2014: 5, alluding to Ps 139:8). The biblical God cannot be assimilated to any of the pagan conceptions of the divine, which lack the radical transcendence of the Creator and Saviour whom Augustine loved so late in life. Instead the true God, who finally found him, transcends the world – and it is precisely by His transcendence that everything exists in Him:

Late have I loved you, O Beauty so old and so new: late have I loved you!
And look! You were within me, and I was outside myself; and it was there that I
searched for you.
In my unloveliness I plunged into the lovely things which you created; ...
Those created things kept me far away from you; yet if they had not been in
you, they would have not been at all (Augustine 2016: 135).

Or to quote Augustine's inimitable aphorism bringing together both divine immanence and transcendence: 'You were deeper within me than the most secret part of me, and greater than the best of me [*Tu ... eras interior intimo meo et superior summo meo*]¹' (2014: 110-111).

Thomas Aquinas

When Aquinas asks in his *Summa theologica* the question: 'Whether God is in all things?,' his answer is unambiguous: 'As long as a thing has being, God must be present to it, according to its mode of being. But being is innermost in each thing ... Hence it must be that God is in all things, and innermost' (2017: Prima pars, Q.8, art.1). Once again, it is creation that leads him to hold together divine transcendence and immanence: 'God is above all things by the excellence of His nature; nevertheless, He is in all things as the cause of the being of all things' (ibid., reply to obj. 1). God being the Creator of all, he is both different from everything else that exists and present in all things as their cause 'not only when they first begin to be, but as long as they are preserved in being' (ibid., response). In analogy to the soul containing the body, God is not only 'in things containing them', but also, 'by a certain similitude to corporeal things, it is said that all things are in God; inasmuch as they are contained by Him' (ibid., reply to obj. 2). His presence in the world is immediate: 'It belongs to the great power of God that He acts immediately in all things. Hence nothing is distant from Him, as if it could be without God in itself. But things are said to be distant from God by the unlikeness to Him in nature or grace; as also He is above all by the excellence of His own nature' (ibid., reply to obj. 3).

Divine transcendence and immanence in the Bible

It should not come as a surprise that the great Christian tradition has held firmly to both divine transcendence and immanence. In fact, Augustine, Aquinas (and many

¹ The classic translation by William Watts provides a more literal rendering: 'Thou at the same time wert more inward than my most inward part; and superior then, unto my supremest' (Augustine 1946: 121).

more) learnt from Scripture that these two truths are not in tension with each other, but that they can be understood within the common framework of creation.

A *locus classicus* is Paul's speech to the Areopagus (Acts 17). Creation occupies centre stage when the apostle confronts his Greek audience with the biblical God: 'What ... you worship as unknown, this I proclaim to you. The God who made the world and everything in it ...' (v. 23-24).² From creation, the apostle deduces different aspects of God's transcendence: (1) his sovereign lordship (v. 24); (2) the impossibility of limiting his presence to specific places (v. 24); (3) his aseity (v. 25). This transcendent Creator God is, at the same time – and by virtue of being the Creator – the God who is near: he is 'not far from each one of us' (v. 27). Paul perhaps quotes a verse known to his audience, without fearing the pantheistic overtones that such a statement may well have had in the ears of those who listened to him: 'In him we live and move and have our being' (v. 28).³

Stressing divine immanence is not a concession to his pagan audience in Athens. Divine transcendence and immanence are also intertwined in Paul's teaching in his letters. The most concise statement is to be found in Ephesians 4:6: 'one God and Father of all, who is over all and through all and in all'. The same twin truths can be predicated of the Son: 'All things were created through him and for him. And he is before all things, and in⁴ him all things hold together' (Col 1:16-17).⁵

Confessing divine transcendence and immanence, connected through creation, is not a theological invention of the apostle to the Gentiles. With his teaching, Paul sits squarely within the tradition of the Hebrew Bible. The most beautiful poetic expression of divine immanence is certainly to be found in Psalm 139:

Where shall I go from your Spirit?
Or where shall I flee from your presence?
If I ascend to heaven, you are there!
If I make my bed in Sheol,⁶ you are there!
If I take the wings of the morning,
and dwell in the uttermost parts of the sea,
even there your hand shall lead me,
and your right hand shall hold me (v. 7-10).

God's immanence, his being present everywhere and actively involved in everything and everyone, is but the corollary of his transcending the world: he is omniscient (v. 1-3), beyond human understanding (v. 6, 17-18), nobody can escape his rule (v. 7-12), he foresees the psalmist's future in its entirety (v. 16). Once again creation is not far from the biblical author's mind. It is as a creature that he is totally open to God's presence:

You formed my inward parts;
you knitted me together in my mother's womb.

² All biblical quotes are taken from the English Standard Version (esv.org).

³ Isho'dad of Merv (following Theodore of Mopsuestia) considered that the sentence comes from an address to Zeus by his son Minos, of which the second line is quoted in Titus 1:12 (Bruce 1990: 384).

⁴ In Greek: *en* (with dative), which could also mean 'by'.

⁵ Augustine, in the opening pages of his *Confessions*, quotes the similarly structured statement in Rom 11:36: 'by whom everything is, and through whom everything is, and in whom everything is.' His rendering follows the Vulgate, whereas the third element in the Greek original is introduced by *eis* (with accusative); and not *en* (with dative), which is found in Eph 4:6. Thus it is better to give it a teleological meaning: 'for him', so that Rom 11:36 cannot be taken as a proof text for divine immanence.

⁶ The Vulgate (in the standard version of the so-called *Psalterium Gallicanum*) translates: 'si descendero in infernum, ades': *Biblia Sacra: Iuxta Vulgatam Versionem*, Stuttgart, Württembergische Bibelanstalt, 1969, p. 942. This is the text which Augustine follows in his *Confessions* (2014: 4).

I praise you, for I am fearfully and wonderfully made.
... Wonderful are your works (v. 13-14).

For the psalmist, holding divine transcendence and immanence together is not theological conjecture. It is the grounds for awe and wonder. Granted, God is beyond everything that the believer can control or comprehend, but this unsurpassable knowledge and power is a sure source of comfort and joy, even in the face of those who oppose the Lord (v. 19-22). Many other texts in the Hebrew canon express the same assurance. Some of the most moving examples can be found in Isaiah, bringing together the highest exaltation of the Lord and his mercy towards the lowliest persons (Isa 57:15; 66:1-2). So, far from being a pantheist, impersonal pervasion of the world, the Lord's immanence is an active presence, ready to save all those who rely on him (Ps 103:11-14; 104:27-28.33).

No tension between divine transcendence and immanence

It is a remarkable feature of the biblical teaching on divine transcendence and immanence that there is no hint of any tension between those affirmations, no need felt to tinker with transcendence in order to allow for a robust notion of immanence or to water down immanence in order to get a stronger concept of transcendence. Quite the contrary: some of the most impressive biblical affirmations of divine immanence come in contexts which also heavily emphasize divine transcendence. Take Psalm 139 and its poetic pondering of God's all-pervasive presence. In the very same psalm, divine omniscience (v. 2-4) and incomprehensibility are affirmed (v. 6). God's foreknowledge of the future includes future acts of free agents, for example the words of the psalmist himself (v. 4). The metaphor of the scroll even suggests divine determination of the whole course of the psalmist's life:

For you formed my inward parts;
you knitted me together in my mother's womb.
... Your eyes saw my unformed substance;
in your book were written, every one of them,
the days that were formed for me,
when as yet there was none of them (v. 13, 16).⁷

In an equivalent manner, the texts quoted above from Isaiah bring together God's exaltation above the whole universe and his compassionate presence with those who are most in need. In fact, the second part of the book of Isaiah contains some of the strongest statements on divine transcendence in the whole Bible. Again and again, it stresses the difference between Yahweh, the Creator of all that exists, and all the other gods, which are but human inventions (Isa 41:6-7,28-29). These cannot do anything (46:1-2); they do not know either the past or the future (Isa 41:21-24; 44:7). But Israel's God is the sovereign Lord of history who works out his plans (Isa 41:4; 44:24-26; 45:5-7,12-13). He is eternal (Isa 43:10; 44:6; 48:12). He knows history from beginning to end (Isa 44:7-8). He foretells what will happen long before it comes to pass – not only

⁷ The ESV adopts a rather literal rendering of v. 16, which respects well 'the rather cryptic Hebrew' (Kidner 1975: 466). Kidner sees two possible meanings: 'either that *the days* of my life were mapped out in advance ..., or that my embryonic members were likewise planned and known before the many stages ('day by day') of their development' (ibid.). The first reading is more straightforward. For the second, 'my members' as the implicit subject needs to be inferred from the singular noun 'my unformed substance'; but it fits better with the immediate context which is about pre-natal development (ibid., n. 1).

because of his unsurpassable knowledge, but because his plans will be accomplished (Isa 46:9-10; cf. 43:10-13).

The same harmony between divine transcendence and immanence can be observed in Paul's speech to the Areopagus. When he agrees with his Athenian audience that 'in him we live and move and have our being' (Acts 17:28), he mentions in the same breath God's aseity, not depending on anything or anyone (v. 24-25), his determination of the nations' destinies (v. 26), and the final judgement day (v. 31).

Creation as the key to hold together divine transcendence and immanence

These biblical treatments of divine transcendence and immanence show that it would be wrong to pit one against the other; rather, they support one another. It is as the transcendent Creator, absolutely distinct from, sovereign over and non-dependent upon his creation, that God is upholding the universe, intimately and actively involved in its history, and in particularly in human life. The idea that God would have to withdraw, to limit himself, in order to allow creation to be, would be utterly foreign to the biblical authors. I doubt they would understand why Jürgen Moltmann (born in 1926) resorts to the cabbalistic concept of *zimsum* (Hebrew for 'concentration', 'contraction') in order to account for creation.

Moltmann strives to set forth a thoroughly 'Trinitarian doctrine of creation'. He considers that too much of traditional thinking started 'from an antithesis between God and the world ... ("God is not-worldly and the world is not-divine")', 1985: 14-15). But such a dualistic outlook cannot properly account for divine immanence. Instead, the so-called Trinitarian doctrine of creation 'proceeds differently, starting from an immanent *tension* in God himself: God creates the world, and at the same time enters into it. He calls it into existence, and at the same time manifests himself through its being'⁸ (ibid.: the italics are in Moltmann's text). But does Moltmann really overcome dualism between God and the world? Why consider that God has first to retreat, to 'make room', in order for the world to really be? It is certainly not a slip of the pen when Moltmann speaks of a '*tension* in God'. No such tension can be perceived in any of the biblical treatments of divine transcendence and immanence.⁹

Instead of speculating on how creation is possible, on how God can be at the same time the transcendent, sovereign Lord of all and intimately immanent in the world, the biblical authors (from the very first sentence onwards) reflect on the relationship between God and the world in the context of creation. Creation is a given; it is a fundamental metaphysical category which does not need any explanation, but which sheds light on all of (natural and human) existence:

Instead of the natural world, theology finds its starting-point in God, the *semper agens*; it tells of his acts, before asking about being. This insight may free us from the dilemma of monism [everything is in God] and dualism [God is distinct of the world] dialectically opposed or related. *The starting-point, taught by Scripture, is the Creator-creature pattern.* We cannot raise ourselves

⁸ Moltmann stresses that both divine transcendence and immanence are taught in the Bible. He considers that it was in response to 'an environment moulded by pantheistic, matriarchial, animist religions' that the Old Testament 'laboriously and perseveringly taught *the difference* between God and the world' (ibid., 13). This aspect of the biblical teaching was then isolated from divine immanence because it was more akin to the modern, scientific outlook: 'This distinction between God and the world was ... seized on by modern theological apologetics as a way of adapting the biblical traditions to the secularizing processes of modern European times' (ibid.).

⁹ When there is some sort of 'tension' to be observed in God, it is always in relationship to evil (i.e. Gen 6:5-6; Jer 31:18-20). Evil is what *should not* be. Thus it brings in real complications, which are not part of God's good creation.

higher and dominate the constitutive structure, we cannot subsume it under an all-embracing notion of being. It involves a real duality, non-symmetrical: absolute independence on one side, total dependence on the other. The obedience of faith, in receiving this orientation as the principle of sound thinking, does not boast that it has solved the monistic-dualistic antinomy, but humbly *refuses* it (Blocher 1990: 16).¹⁰

Or to use Wittgensteinian language: instead of solving the puzzle of how God can be both transcendent and immanent, creation dissolves it and leads us to affirm both truths, as strongly as we possibly can. Concerning transcendence, God is truly the eternal, omniscient and omnipotent Creator, wholly distinct from the world and sovereign Lord over history – along the lines of what is sometimes (slightly disparagingly) called ‘traditional’ theism. Concerning immanence, there is no need for any form of divine self-limitation whatsoever – in him truly, ‘we live and move and have our being’ (Acts 17:28).

The legitimacy of taking creation as foundational

But is it not arbitrary to simply affirm that divine transcendence and immanence go together on the basis of creation? Is it not a fideistic manoeuvre to just take creation for granted? I would like to argue that this is not the case: that Christians are warranted in taking creation as the starting point of their understanding of the God-world relationship, which then dissolves the perceived antinomy between God’s transcendence and immanence.

We have learned from the failure of (strong) foundationalism that there are no evident, infallible or incorrigible truths from which human reflection could start. All philosophical systems use unproven axioms. Neocalvinists, such as Abraham Kuyper, Herman Dooyeweerd and Cornelius Van Til, had argued that faith precedes knowledge, long before the failure of foundationalism became received wisdom in epistemology, with Thomas Kuhn’s *The Structure of Scientific Revolutions* (1962). Therefore, choosing creation as the starting point for our thinking about the relationship between God and the world is not taking a fideistic posture, over against ‘scientific’ rationality. Rather, it is a matter of consciously adopting one fiduciary framework (in Polanyian language) among several competitors.

Alvin Plantinga has convincingly argued that Christian academics are within their epistemic rights to use a different basis for their reasoning than their non-Christian colleagues. As there are no neutral ‘facts’, why restrict ourselves to what is currently deemed to be ‘academically correct’? Obviously, this does not mean that anything goes: Christians and non-Christians alike are held to high standards of methodological rigour. But whatever we have come to rationally believe can be part of a valid argument:

It is not the case that rationality, or proper philosophical method, or intellectual responsibility, or the new scientific morality, or whatever, require that we start from beliefs we share with everyone else ... In trying to give a satisfying philosophical account of some area or phenomenon, we may properly appeal, in our account or explanation, to anything else we already rationally believe – whether it be current science or Christian doctrine (Plantinga 1984: 253-271).

In fact, taking creation as the starting point is not only legitimate, but is required by theism itself. If we fully acknowledge God’s transcendence, any general framework which subsumes God and the world is excluded. Such an overarching framework would

¹⁰ For a critique of Moltmann’s use of *zimzum*, see Blocher 1990: 14-15).

constitute a reality over and above God – a perspective which cannot be accommodated by theism. Therefore the distinction between the Creator and his creation should not be confused with an antithesis between God and the world, as if ‘God’ and ‘world’ were notions at our disposal, of which we knew the definitions before interacting with the biblical data. If that were the case, it would make sense to inquire into their relationship and to try to elaborate a metaphysical system which could somehow accommodate both transcendence and immanence. But if God is the foundation of all being, we should not expect to be able to comprehend him, nor to fully grasp his relationship with the world, by our own thinking. Instead, we should be prepared to learn from the biblical texts themselves who God is and how the world relates to him. We then come to see that divine transcendence and immanence are not antithetical considerations, but two sides of the same coin.

Divine transcendence and immanence and scientific practice

Any reasoning occurs inside a fiduciary framework. But that does not imply relativism, because the choice between frameworks is not arbitrary. Contending paradigms differ in the degree of warrant they enjoy. Coherence, ability to account for the data and fruitfulness are three important criteria by which to judge their comparative value. This is not the place to attempt a wholesale justification of the biblical worldview. In what follows, I will concentrate on the implications of the biblical understanding of divine transcendence and immanence for the practice of science. In particular, I want to show that creation provides an illuminating framework in which to reconsider some of the questions that are raised by a scientific description of the world: the distinction between science and scientism, reductionism, laws of nature, human freedom and determinism.

Science without scientism

As is well known, creation provides a framework which is conducive to the scientific endeavour as several of the fundamental presuppositions of modern scientific method flow from theism. In addition, divine transcendence guards against scientism, the illusion that science can explain everything. God being transcendent, he is beyond scientific exploration. And the world, being his handiwork, also partakes of his incomprehensibility. This theme occurs frequently in Old Testament texts dealing with nature (Job 28:20-28; 37:14-16; 38:16-24; 39:1-2; 40:1-2; 42:1-3; Isa 40:12-14; Jer 31:37; 33:22). It does not foster global scepticism, as humanity is created in God’s image and therefore (partly) shares God’s privilege of knowing the world. But it highlights the fact that human knowledge is always partial. Historically, the conviction of nature’s incomprehensibility underpinned Newton’s empiricism: humans cannot hope to attain an exhaustive, rational knowledge and therefore need to perform experiments, in order to see how God created the world (cf. Jaeger 2017: 64).

A richly diverse world

The legitimacy, and even necessity, of multiple forms of inquiry comes as a twofold consequence of divine transcendence, combined with the creation of humanity in the image of God. Firstly, human beings are the image of God, not God themselves. Humanity reflects something of the transcendence of the God whose image they bear. They are part of the created world (created on the sixth day together with the land animals, Gen 1:24-30), but at the same time they transcend the material world (cf. Gen 2:7; 2 Cor 4:16; Col 2:5a; 1 Pet 3:4). Therefore, any methodology developed to describe non-human entities (which would include physics and chemistry), cannot provide a complete picture of human beings. In particular, the notion of personhood extends

beyond the scope of the natural sciences' objectifying method (cf. 1 Cor 2:10), so that even biology is inadequate for describing humanity. Thus divine transcendence, reflected in humans as the image of God, proscribes scientific reductionism.

Once we have acknowledged the difference between the human and the non-human, it becomes likely that there are more than just these two realms, but that the created world is composed of many facets. The opening chapter of Genesis contains several clues that suggest plurality: the theme of separation (Gen 1:4, 6, 9, 14, 18); the creation of plants and animals 'according to their kinds' (Gen 1:12, 21, 24); the six creation days.

Non-reductionism has lately become fashionable in philosophy of mind, but also more generally in philosophy of science. Reductionist models have patently failed to make good on their grandiose promises to offer reductionist (mainly physicalist) explanations for basic aspects of our experience, such as consciousness, intentionality of thought and rationality. Different emergentist accounts have been proposed, among which non-reductive physicalism features prominently. But note that God's transcendence, as reflected in his human image, encourages a more radical departure from reductionism than standard emergentist models, in which higher levels supervene upon a (typically physical) base level.¹¹ Methods of inquiry developed to describe the inanimate world do not enjoy any privileges over more personally involved interactions with reality. Why try to deduce the latter from the former?

Instead, creation as the handiwork of the transcendent God leads to a clear acknowledgement of multiple dimensions. The contribution to our knowledge of each particular science (both natural and human) is valuable, but partial. Physics, biology, neuroscience, psychology, sociology, philosophy, theology, etc., each adopts a specific angle of inquiry, a method which is fitting for certain questions, but not for others. Like a spatial projection, each form of exploration captures one dimension of reality, but does not provide a complete description (cf. Jaeger 2018: 231-253).

Scientific laws describing partial causal contributions: Steven Horst's Cognitive Pluralism

The perspective just outlined bears some similarities to the conception which the philosopher Steven Horst (at Wesleyan University in Middletown, Connecticut) has developed under the name of Cognitive Pluralism. It is cognitive in the sense that it takes into account the constructive role of the mind in model-building: our models (in science or elsewhere) 'are idealized representations of particular features of the world'. It is pluralist in the sense that it is inclined to take the plurality of existing models in the current sciences not as a transitory feature, but as a consequence of 'facts about *how* the mind models the world'¹² (Horst 2011: 9). Believing otherwise would come down to the 'Rationalistic assumption that everything about the world must be intelligible to us in the form of a single theoretical framework' (ibid., 118). Not only does this assumption seem 'quite hubristic' (ibid), but also our best available scientific theories do not support it: general relativity and quantum mechanics are inconsistent with each other (ibid., 117).

¹¹ O'Connor and Wong (2015) assess the prospects and difficulties of a great variety of emergentist accounts. The same authors argue that standard non-reductive physicalism is doomed to fail, as are all emergentist accounts relying on supervenience (O'Connor and Wong 2005). They argue instead for non-supervenient emergent properties (and individuals), so that causal closure of the physical fails to apply. Their account is not physicalist insofar as physical objects have the inherent disposition to give rise to emergent non-physical (mental) properties in the appropriate circumstances.

¹² On an autobiographical note: I had come to the conclusions expressed in the preceding section before discovering Steven Horst's work. His book provided me with rigorous philosophical argument and thorough elaboration for my embryonic intuitions.

Applied to scientific laws, Cognitive Pluralism takes them to be ‘*idealized* descriptions of the *real* world that highlight the *dynamic* principles that underlie real-world kinematics’ (Horst 2016: 175). This conception is both realistic (laws are invariants in the real world) and cognitivist (laws are part of our representations of the world). The second trait is the basis for there being multiple sets of laws, or theories, because they are part of different representations, depending on the invariants studied in a given context. Unless the Rationalist assumption is true, our ‘mind necessarily understands the world in a fragmentary way’, so that the plurality of scientific models is irreducible¹³ (Horst 2011: 9, 117f, 132-134). Therefore we should not expect any one particular science (or even the sciences as a whole) to provide an exhaustive description of reality. On the contrary, ‘dynamic laws express *potential partial causal contributors to real-world kinematics*’ (Horst 2016: 178).

Such a pluralist view of scientific laws has immediate implications for reductionism. However successful a certain scientific model is in a certain domain, it does not preclude the possibility that there are other causal factors at work. Take as an example the law of gravitation. It does not say anything at all about the question of whether, in addition to gravitational forces, other causal factors are present, which can be described by other laws, for example electromagnetic forces. It does not even exclude the existence of extra causal factors which cannot be described by scientific laws, as would be the case for agent causation. Thus it is simply wrong to assume that a scientific description of the world necessarily leads to reductionism, or excludes free will.

Divine transcendence and immanence and human freedom

The considerations above show that contemporary science, rightly understood, does not exclude free-will. But so far we have only established that they are compatible. The fragmentary character of scientific descriptions does not prove in itself that humans are capable of significantly free actions. It is therefore noteworthy that creation, with its particular understanding of the God-world relationship, provides a sure foundation for human freedom. Not only this, but it also allows us to understand the relationship between human freedom and the natural sciences, instead of positing them side by side, as a more fragmented view of reality would do.

The freedom of created humankind

Creation differs from other worldviews in that it places the origin of the world in the free act of the transcendent God. Creation does not stem from the nature of God, but from His will (1 Cor 15:38, Rev 4:11). The distinction between divine will and divine nature expresses the personal character of the biblical God: only a personal God can will something into being that is different from his nature.

The freedom of the Creator is not a mere metaphysical presupposition; it pervades the whole of biblical religion. In this regard, we note the rejection of all forms of magic. No rite is effective in itself; divinity cannot be manipulated by magic formulae or acts (cf. Jer 7:4-5). Prayer must be an expression of trust from the heart and not a vain repetition of words (Isa 29:13; Matt 6:7). Samuel reminds us that ‘to obey is better than sacrifice’ (1 Sam 15:22). Faced with the personal God, nobody can be content with ritual obedience; responsible and just action is required (cf. Amos 5:21-24) (cf. Oswalt 2009: 75-76).

¹³ I am less inclined than Horst is to postulate “forced errors” – ways we are architecturally constrained to *misrepresent* the world’ (Horst 2011: 139; italics in the original). This probably indicates that I have somewhat more realistic leanings than Horst. As long as we do not absolutise our partial models, I do not see why they need to include error.

Human action thus finds its place in a world born of divine freedom. As the image of God, humanity participates in the power to act of their Creator and therefore in his freedom. Otherwise, they could not stand as a covenantal partner before God, nor fulfil their role as co-workers in the earthly creation. Gregory of Nyssa, in the fourth century, expresses it thus:

He made human nature participant in all good; for if the Deity is the fulness [*sic*] of good, and this is His image, then the image finds its resemblance to the Archetype in being filled with all good. Thus there is in us the principle of all excellence, all virtue and wisdom ...: but pre-eminent among all is the fact that we are free from necessity, and not in bondage to any natural power, but have decision in our own power as we please (1994: 405).

The Father's Providence

Not only does the freedom of the Creator have as its corollary the freedom of humanity created in his image, creation also establishes a world order which is an appropriate environment for human action. One's conception of the origin of the world will inevitably influence one's conception of the order (or absence of order) in the world. Creation being a free act, providence as its twin doctrine bears the marks of free action. The world is neither governed by an impersonal law nor left to chance. In fact, though opposed, these two conceptions have similar implications for human action: they place humanity in an impersonal environment. Human freedom would be an illusion, or at most a desperate attempt at action in the face of an indifferent order. Personalist providence instead provides a context in which human action can make sense. It is only in a world created by the personal God of the Bible that human freedom is truly at home, as the neo-Calvinist apologist Cornelius Van Til pointed out: 'A finite personality could function in none other than a completely personalistic atmosphere, and such an atmosphere can be supplied to him only if his existence depends entirely upon the exhaustive personality of God' (1969: 97).

Modern reductionist accounts are not the first to propose an understanding of humans in impersonal categories. From the first centuries of Christianity, the Church Fathers fought any conception which would diminish human freedom and moral responsibility. Against all Greek conceptions of the natural order, be they deterministic or random, Platonic, Aristotelian, Stoic or Epicurean, 'the first Christian thinkers ... rightly felt themselves in a new world' (Gilson 1936: 153). The providence of the Creator God is neither *fatum* nor *fortuna*. On the one hand, it is transcendent and personal so that it does not enclose created beings in an iron law inherent to the world that would prevent freedom. To use Calvin's words: 'We do not ... contrive a necessity out of the perpetual connection and intimately related series of causes, which is contained in nature; but we make God the ruler and governor of all things' (2011: 207).

On the other hand, what happens is not random, and humans are not the products of pure chance, which will erase them as surely as it gave rise to them. Some base this Epicurean conclusion today on neo-Darwinian evolution. But it should first be noted that such a metaphysical implication would only be warranted if neo-Darwinism delivered a complete picture of reality. Taking such a stance is scientism, which goes beyond science. Second, evolution does not amount to pure chance: probabilistic evolutionary processes occur in the context of natural regularities described by laws. Third, Simon Conway Morris, professor of evolutionary palaeobiology at the University of Cambridge, has shown that (neo-)Darwinian evolution does not imply the absence of design in the universe. Convergent evolution, that is the fact that similar structures evolve through different evolutionary paths, supports the view that the emergence of intelligence, resembling the human mind, was inevitable. The similarity between human intelligence and certain aptitudes in higher animals, not all of which are on the same

branch of the evolutionary tree (such as the great apes, dolphins, and even some birds) supports a Christian Platonist view of reality. It implies universal rational principles, rendering an atheist interpretation of life very tenuous (Conway Morris 2003).

A multidimensional but integrated view of humans

In conclusion to our reflections on how creation accounts for human freedom, let us point out that this perspective has the advantage of offering a multidimensional but integrated view of humankind, providing space for our freedom, without treating it as a foreign element or as opposed to the scientific description. Admittedly, it is acknowledged that natural science cannot fully comprehend this freedom, any more than it can provide moral grounds for personal dignity or grasp humans' openness to transcendence. The methodologies used in physics, chemistry, or biology are not attuned to these aspects of human beings; in fact, they do not even have the appropriate concepts for them.

Immanuel Kant famously tried to solve the problem by including human freedom in the realm of *noumena*, things as they are in themselves [*Ding an sich*], beyond the *phenomena*, things as we experience them. Scientific knowledge is only possible of the *phenomena*, although we must assume that the *noumena* exist: 'Otherwise, we should require to affirm the existence of an appearance, without something that appears – which would be absurd' (Kant 1787: III,17). That implies that human beings *qua free and rational agents* are not accessible to scientific description. Therefore we cannot *know*, but only believe that we are free. Nevertheless this is not an optional belief: we would renounce our dignity as moral subjects if we gave it up. When we act according to the moral obligation under which we are placed, we are free from scientific determination. In this way, 'the contradiction disappears: ... the unconditioned does not lie in things as we know them, or as they are given to us, but in things as they are in themselves, beyond the range of our cognition' (Ibid).

Kant's answer to the question of how we can reconcile the natural scientific description of humans with their freedom is a special case of what Stephen Jay Gould would later call NOMA, 'non-overlapping magisteria' (Gould 1997: 16-22), the conception that science and religion concern domains that are totally distinct from each other. Such a view has the obvious advantage of ensuring that no scientific progress whatsoever can threaten human freedom. But it comes at a high price: it isolates our experience of being free from all that can be scientifically examined. However, as soon as we recognize that scientific descriptions are always partial, singling out specific aspects, there is no need to relegate the moral and spiritual aspects of human beings to the mystical domain of *noumena*. For in that case, one can recognize physiological causalities and, at the same time, consider that human beings act freely (sometimes).

The integrated view provided by creation makes it possible to address the important question of the interactions between freedom on the one hand and scientific determinations on the other. Not only must NOMA-like approaches treat as illusory our experience that the will can have scientifically describable consequences (I decide, of my own free will, to raise my arm, and I manage to do so.¹⁴) They also cannot account for the fact that we experience our freedom as non-absolute, shaped by many physiological, environmental, social and other influences. In fact, our actions are on a continuum between completely involuntary, unconscious actions (like breathing) and deeply considered choices that engage our whole person. But such a continuum which involves, in varying degrees, our freedom as morally responsible agents and

¹⁴ On the Libet experiments, which were designed to prove that the brain initiates movements which we perceive as voluntary before any conscious decision, Peter Clarke concludes that 'at the neurophysiological level, it has not been shown convincingly that a neural 'decision' sufficient to cause the movement occurs before the time of awareness of the decision to move. Even if this could be shown, it would not undermine the conceptions of free will that are defended by most philosophers' (2013: 4).

scientifically describable factors, cannot be understood using a model that has isolated human free actions from science, as does the Kantian distinction between *phenomena* and *noumena*, and more generally any NOMA-like approach. Instead, creation offers a more integrated perspective, without conflating humans with their scientific description. Obviously, this does not save us the painstaking work of elaborating multi-dimensional models in order to understand selected aspects of human behaviour and the interactions between these aspects.¹⁵ Creation provides a productive theological starting-point; it is not meant to be the end point in our exploration of the world. Rather, it sets a framework which opens up promising avenues for research.

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¹⁵ I consider Steven Horst's work to be an important step in the right direction. Without referring explicitly to a Christian worldview, he discusses detailed 'case studies of explanation in the sciences of mind' in the general framework of his Cognitive Pluralism (Horst 2011: 141-262).

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