

IAN J. THOMPSON**The Consistency of Physical Law With Divine Immanence**

A model is presented to show how the existence of physical law could be a reasonable consequence of Divine Immanence in the world of natural phenomena. Divine Immanence is seen as the continual production of the principal causes or dispositions which enable created things to act and change. It is argued that this model is physically consistent, philosophically coherent, and theologically sound.

Keywords: Immanence, transcendence, theism, natural law, physics, science, dispositions, problem of evil.

1 Introduction

Do things in the world proceed by themselves, or are they dependent for their continued operation on something else? On one hand, beings in the universe certainly seem to act and interact autonomously, and modern physics has been increasingly successful in showing the self-sufficient and law-like behaviour of natural objects. On the other hand, classical theism has included the idea that God, as well as creating the world, also sustains the continued existence of the created entities. This paper will discuss the question¹ of whether God may be said to sustain the world, and, if so, how this may be accomplished in a manner consistent with physical observations.

Physicists have traditionally been suspicious of any intimate involvement of God with the natural world, being for example² 'deeply suspicious of how [this] could corrupt the process of scientific enquiry. At what point in the investigation of the evolution of the human eye, for example, will investigators feel free to chicken out, ascribing some parts of the process to natural selection and others to God?' They might be more inclined to the weaker claim of a 'once and for all God, one who drew up the laws of physics and then left us to it, in the Big Bang perhaps', as they are reluctant to allow a 'God of the gaps' who may have intervened from time to time and disrupted the natural order. For they want to determine those causes of natural things from which effects regularly proceed as described by physical laws. I will be attempting to see if divine involvement can be consistent with these kinds of physical laws.

¹ This issue is to be distinguished from the 'historical questions' of *if, when, or how* the universe originally was formed.

² John Maddox, review of *The Probability of God* by Hugh Montefiore, in *Nature*, 315 (23 May 1985), p. 353.

In philosophy there have been similar preferences for a more abstract or 'metaphysical' account of the relation between Divinity and nature, and a reluctance to talk of Divine immanence directly. Confining ourselves to those philosophies of process³ that seek to describe the real properties and activities of things in nature, the closest these philosophies come to immanence is when they consider God to be the 'arche', Principle or Ground underlying all natural changes. These philosophies often mention an immanent reason (not so much the immanent power) that provides the necessary ground for contingent natural events. But although they describe reasons essential to the processes themselves, and not merely in the mind of someone looking from outside, a 'ground' or 'arche' need not be immanent in the sense of being internal to the actual process. The clock-maker, for example, is not immanent in the clock he has produced. For the Divine to be immanent, it must be *within* in some sense, and not just something on which something else depends, which could be external.

In theology there has long been a tension between the transcendence and the immanence of God, both of which are asserted by classical theism. To avoid a deism which has only transcendence, to avoid pantheism which has only immanence, and thus to see how theism may be a coherent belief, it is necessary to give some rational account of how God may be both transcendent of and immanent in the world. One common account⁴ has been to see God as the 'Author, Sustainer, and Finisher' of all natural processes. Thus with thinkers ranging from Aquinas to Descartes, 'the action of divine conservation is construed to be an "extension" of the action of divine creation',⁵ or even essentially the same,⁶ but the means of this conservation is rarely explained further. Process Theologies, on the other hand, stress the involvement of God in the world, but seem to lose sight of His Transcendence. Another theological account, equally well established,⁷ sees the Divine immanence as the indwelling of God's omnipresent Spirit. This view would seem to express certain basic principles, and I will be taking these up in this paper, but the details of the relationship between the Spirit and natural beings should be made clearer. The obscurity is compounded by increasing uncertainties over the nature of any kind of relationship between mental and physical entities.

Both the philosophical and theological accounts leave uncertain the question of exactly how, in an effective as well as in an abstract sense, the Divine is immanent in nature. Thus, for instance, they do not describe the

3 Ivor Leclerc in *The Nature of Physical Existence*, Muirhead Library of Philosophy, (Allen & Unwin, London, 1972) looks particularly at the systems of Aristotle, Leibniz, and Whitehead.

4 J. H. Newman, *Essay in Aid of a Grammar of Assent* (1870) published by University of Notre Dame Press (Notre Dame, London), 1979, p. 95.

5 As summarised in Robert A. Oakes, 'A New Argument For the Existence of God', *New Scholasticism*, (1980) 54, pp. 213-223.

6 See for example J. K. Kvanvig & H. J. McCann 'Divine Conservation and the Persistence of the World', pp. 13-49 in T. V. Morris (ed.) *Divine and Human Action*, Cornell U.P., 1988.

7 Hugh Montefiore *The Probability of God*, SCM Press (London), 1985, ch. 9.

actual relationship between the immanent Divine and the causal powers determined by physical investigation, and therefore find it difficult to formulate possible replies to the physicist's query above.

For these reasons I wish in this paper to restate an old idea, one that has been only occasionally taken up,⁸ and expand it using a modern philosophy of dispositions. This idea is a simple scheme for the relation of Divine and natural powers, and suggests how physical laws might be not only compatible with Divine Immanence in nature, but also a consequence of Immanence. The thesis I wish to defend may be called the hypothesis of 'Divine Dispositional Immanence' (DDI for short), and is:

DDI: The dispositions of an object are those derivatives of Divine Power that accord with what is actual about that object.

Here, 'actuality' is defined as that which is not constituted by capacities, potentialities and/or dispositions of any kind. Exactly what is actual about a natural object depends on a detailed physics, and will be different according to Newtonian and quantum mechanics (see ref.⁹). Which actualities then correspond to which dispositions is a subject for further investigation, as is whether this is a strict one-to-one correspondence.

To explain what the DDI thesis means, consider two analogies. God provides life as the sun shines on the earth. The sun shining on the earth is constant, but the energy received by the earth varies by days and seasons. We know, however, that this variation is according to the earth's distance and orientation: according to something actual about the earth, not because of variations in the sun. A second analogy is that God provides life as we are provided with food. Consider the way animals consume food in order to live. What an animal is capable of doing after eating depends on its digestive system and how it has assimilated the food. Different species will respond quite differently to the same food, according to how they are constituted. (These analogies are discussed further in section 2.5)

If on first sight the hypothesis seems too far-fetched or implausible, remember that it is designed to reproduce just those kinds of effects we usually see in the world around us. Remember too that I have not specified what in fact is 'actual', so strictly speaking the thesis has 'materialistic', 'dualistic' and 'idealistic' versions, depending on whether only matter is actual, or both matter and mind, or mind only. Thus, the DDI thesis defines a general framework in which these theories of nature can be discussed within a theistic context. One consequence of Immanence should be to make all things (mind and/or matter) behave as if they were active from

⁸ A similar view is outlined in P. van Inwagen 'The Place of Chance in a World Sustained by God', pp. 211–235 in T. V. Morris (ed.) *Divine and Human Action*, Cornell U.P., 1988. The current scheme is one of a number of emanationist theories that have been presented. The clearest presentation, I believe, is by the Swedish philosopher and theologian Emmanuel Swedenborg in the 18th century.

⁹ Ian Thompson 'Real Dispositions in the Physical World', *British Jnl. for the Phil. Science* (1988) 39 pp. 67–79.

themselves, as that is the way they appear to us. We might rightly be wary of a God with absolute and arbitrary power to act under any pretext whatsoever: the precise content of the DDI thesis is that, on the contrary, God acts in a reasonable and orderly fashion compatible with (some kind of) natural regularities.

This paper may be regarded as an exercise in the Theology of Nature, but of a kind that is hypothetico-deductive, not inductive. That is, we postulate an explanatory hypothesis such as the DDI thesis, and follow its consequences to see how well they agree with what we know already. The hypothesis can only be entertained, however, if expressed coherently, and considered logically possible. To that end, section 2 presents philosophical analyses of four constituent concepts used in the DDI thesis. Only if these ideas are not incoherent can the DDI thesis be reasonably considered. The thesis must also be shown to be consistent with physics, as physics is an existing attempt to relate the actual forms of natural objects to their dispositions and potentialities.

Finally, the DDI thesis will be considered within the framework of a theistic theology that might be considered already well established. Since the DDI thesis is a statement of what God does, and may be a restriction on arbitrary omnipotence, the thesis will have to be shown to be theologically reasonable. We should also see if it is preferable to *occasionalism*, whereby God is the direct and only cause of natural events, and to *concurrentism*, whereby God is a general cause which must cooperate with pre-existing natural powers. That is, we must show that the DDI thesis describes what would be done by God as He is understood in the western tradition, and is not opposed by other attributes the tradition believes essential to the Divine. The demonstration will be based on the argument that God, if Life Itself, cannot create natural beings that both are distinct from Him, and live from themselves (i.e. that are their own dispositions to act). What can be done is to provide the life of these beings for them to live as if from themselves. This is what appears to happen, although in this paper I will be discussing only natural dispositions, and not looking at the full range of 'life'.

2 Philosophical Coherence

In this section, several concepts and ideas are examined and explained in an attempt to show their logical possibility, if not also their philosophical plausibility. These are (1) that natural objects can have real dispositions,¹⁰ (2) that it is coherent to talk of 'dispositions according to what is actual', (3) that meaning can be given to the term 'derivative disposition', and (4) that we have a true immanence if we adopt the DDI thesis. Finally there

¹⁰ For a general introduction, see R. Harre and E. H. Madden, *Causal Powers: A Theory of Natural Necessity*, Blackwell (Oxford), 1975, p. 86. See also R. Harre 'Powers', *British Journal for the Philosophy of Science*, (1970) 21 pp. 81-101.

is the question of the validity of the metaphors of 'providing', 'receiving' and 'retaining' dispositions.

Explanations therefore start with the meaning of the term 'disposition', and the observation that dispositional properties can never be reduced to entirely static or formal structural properties. Their explanation must always involve some irreducibly 'causal' feature of some kind: some dynamic (rather than static) property.

2.1 Dispositions, and their categorical irreducibility

I will be using the terms 'power', 'potential', 'capability', 'capacity', 'propensity' and 'cause' as examples in the category of dispositional properties of objects.¹¹ The power of an acid to dissolve a metal, for example, is a dispositional property. It says what *would* happen if certain circumstances occurred, namely that the acid was put in contact with the metal at a suitable temperature. The electric and gravitational potentials are measures of capacities to exert forces, should a suitable test particle be present. We normally believe that the dissolving powers of acid and the potentials of electric charges are still present even if metals or test particles are not present, and then seek to explain these dispositional properties in terms of some feature of the object (acid or electric charge) that gives rise to them.

We must note, however, that this explanation of dispositional properties only explains or reduces them to other dispositions, and *not* to entirely static or structural properties. For suppose that the exact shape and size of a pencil were known, along with all the shapes and sizes of all its atomic parts, but no information about the dispositions of these parts. We would still know nothing about how the pencil would change with time or on interactions. In fact, if it and its parts had no dispositional properties, as Hume wants to argue, then we have his conclusion that any actions or changes (apart perhaps from uniform motion) would be entirely inexplicable: there would be nothing about the pencil that could lead to these changes rather than any others. This categorical irreducibility of dispositions was seen clearly by Aristotle and Leibniz, and has been explained at

¹¹ The ascription of properties in this category is typically, adapting a definition of Harre and Madden,¹⁰ of the form

'Object S has the dispositional power P to do action A' *if and only if*

'if S is in some circumstances C, then there will be a non-zero likelihood of S doing A, in virtue of the constitution of S. In general, C will depend on P and the kind of the action A'.

Here, the 'circumstances C' is usually defined by multiple spatial relations to other objects, and the 'action A' can either be a change in S itself or an interaction with other objects. The phrase 'in virtue of the constitution of S' is designed¹⁰ to exclude 'changes' to certain properties of S that are changes in purely external relations that may come about completely independently of whatever S is actually like. The double 'if' in the definition is important: it reflects the essential subjunctive nature of dispositions.

Note that we are not with these ascriptions assuming a permanent 'nature' of the object from which all its powers can be always deduced, only that at any given time there is 'something about the object', a 'real internal constitution' (to use Locke's phrase), that explains all the dispositions it in fact has at that time.

some length recently by Leclerc,³ Taylor,¹² Mellor,¹³ Harre & Madden,¹⁰ and Emmet.¹⁴ According to Shoemaker,¹⁵ the continued identity of objects also depends on their causal properties. There seems no way to avoid¹⁶ the conclusion that something like dispositions are a *fundamental* part of any physical explanation. Therefore, for the purposes of this paper, I take the reality of dispositional properties to be philosophically plausible, even though their exact features are not deducible *a priori*, and must be the subject of empirical (scientific) investigations.

2.2 Physics

Dispositions first appear in physics as the macroscopic features of observable objects that we wish to explain. Dispositional properties are largely those which cannot be explained purely by the location and shape of these objects, but require *causal* kinds of ascriptions and analyses, as explained above, in terms of causal powers. Thus the elasticity of a solid, for example, is explained in terms of the attractions between the electrons and their neighbouring atoms. Note that it is not enough to say that the elasticity can be explained simply in terms of the 'electronic structure', as purely structural properties cannot explain dispositional features without assuming some dispositions (such as charge, mass etc.) inherent in the electrons themselves. This irreducibility of causal explanation in physics has been discussed in detail elsewhere.⁹

In order to determine the overall consistency of the DDI thesis with physics, we note that some similar kind of thesis is *necessary* if physics is to contain not only a phenomenological description of causes,¹⁷ but also a mathematical foundation that determines causes according to actualities. We conclude that the DDI thesis is consistent with Newtonian physics if 'according to what is actual' is taken to mean 'according to the spatial shape and configuration of the atomic particles'. It can also be consistent with quantum mechanics if 'actuality' means 'the quantum numbers of the most

12 Richard Taylor, *Action and Purpose*, Prentice-Hall (New Jersey), 1966.

13 D. H. Mellor 'In Defence of Dispositions', *Philosophical Review*, (1974) 83, no. 2, p. 157-181.

14 Dorothy Emmet *The Effectiveness of Causes*, Macmillan (London), 1984, ch. 8, and references therein.

15 Sidney Shoemaker 'Identity, Properties and Causality' in *Midwest Studies in Philosophy* Vol. IV (University of Minnesota, 1979) pp. 321-342.

16 This holds however much we may dislike notions resembling 'occult powers'. We could only do one or more of the following (a) deny the subjunctive in the power ascription as anything more than hypothetical, (b) treat science as finding only the regularity of effects and not as discovering causes and determining constitutions, or (c) consider the world as a 'Zeno universe' that has only successive states and no proper changes. My objections to these 'escape moves' are summarised separately.⁹

17 Nancy Cartwright *How the Laws of Physics Lie* Clarendon Press (Oxford), 1983. One of her objections to 'laws of physics' is that they do not say what *does* happen, only what *might* happen in suitable circumstances (e.g. no interference from outside influences). This behaviour is more understandable, however, when laws are regarded as laws of causes, not simply as always of effects.

elementary particles, and also the definite past events that determine the current quantum state'.

A distinction is being made between the 'Principal Cause' (that disposition which operates), and the 'Instrumental Cause' (that circumstance by means of which dispositions operate). Principal causes operate according to instrumental causes. Both are necessary for any action, for example, when a stone is let fall: the principal cause is the earth's gravitational attraction, and the instrumental cause is our action of letting go. Its hitting the ground is thus caused by our letting go, but only as an instrumental cause. Many common uses of 'cause' refer to instrumental causes rather than principal causes, as it is only in the instrumental sense that events can be said to be causes. The distinction between principal and instrumental causes is important, as the DDI thesis can be regarded as the claim that God is the original principal cause of all events. Principal causes cannot operate without suitable conditions and actual circumstances (i.e. without suitable instrumental causes), and the DDI thesis states simply that the selection of which principal causes can operate must depend on which instrumental causes are actually present.

2.3 Derivative Dispositions

Natural dispositions, according to the DDI thesis, are 'derivative' from the Divine, in some sense of 'derivation' to be explained. In this section I first show by examples what is meant by a 'derivative disposition', and then examine how such dispositions differ from 'component dispositions'. I want them to be not part of the Divine, but generated by Divine action when necessary. Having derivative dispositions means that natural dispositions may be the principal causes of physical events, and also that the (original) principal cause of these natural dispositions can be the Divine Itself. Thus, there can be successive or derivative stages in the way the Divine Power leads to natural events.

Derivative dispositions arise when the accomplishment of a given disposition requires the operation of successive steps of kinds different from the overall step. The original disposition on its operation therefore generates from itself the 'derived dispositions' for the intermediate steps, which are means to the original end. An original 'disposition to learn', for example, can generate the derived 'disposition to read books', which can generate further 'dispositions to search for books'. These dispositions would then generate dispositions to move one's body, which in turn lead ultimately to one's limbs having (physical) dispositions to move. These successively generated dispositions are all derived from the original disposition to learn, according to the specific situations.

That such derivative dispositions can be formed means the original disposition was not a *simple* disposition, but had considerable complexity in its first appearance. However, the 'disposition to search for a book' is not strictly a component of a 'disposition to learn', in the sense of being always

an actual part of that disposition, as it is only derived in appropriate circumstances. For this reason we talk of 'derived' rather than 'component' dispositions, as the 'disposition to learn' is not simply the mere aggregate of all the dispositions that can be derived from it, just as any disposition or cause is not merely an aggregate of all its possible effects. Rather, the original disposition is more like a 'higher order' disposition to generate its derived dispositions according to circumstances. Just as the effects of a disposition are not contained within it, but are generated from it according to circumstances, so derived dispositions are not contained within a higher-order disposition, but are generated from it according to circumstances.

The detailed selection of derived dispositions may be quite complicated in general, as it depends not only on the initial state prior to any of the successive steps, but also on each individual kind of the original disposition. I claim however that (on reflection) we all can be made aware of some of the successive derivations in our dispositions to act, as we select and act out sequences of means to end.¹⁸

If we adopt the DDI thesis, the general sequence of derivative dispositions is ultimately a consequence of the complexity of Divine Omnipotence. We should not be surprised by the possibility of such complexity: belief that God is One should not mean that He is always a bare and simple unity, or that He is incapable of responding to complex situations in appropriate ways.

2.4 Immanence and Transcendence?

Since the dispositions of an object are essential to its nature, and are thus 'within' the object, on the DDI thesis the Divine is within all objects without being identical to any of them. God is within objects because He does not act on them merely externally, as then they would need a distinct capacity to respond: one that did not come from God. This is contrary to the DDI thesis, which is that *all* capacities and dispositions derive from the Divine, including dispositions to respond to external influences. On this basis I believe that we have a true Immanence with the DDI thesis, whereby we have a God who gives beings all their capacities and liabilities: *all* their capacities to act and react. We could adopt the principle that 'one is at least where one acts', and then the Divine would be at *least* present in natural things.¹⁹

Although the relation between God and nature is very close, with God

18 It may well be that, since not all these derived dispositions are strictly physical, we have that beginning of an account of how minds play an intermediate role between the Divine Source and the operation of selected parts of the physical world.

19 It is not clear, however, that this principle applies directly in this case. It is also conceivable that the Divine can act in space without necessarily being spatial, just as, for example, the wave function in quantum mechanics seems to behave. The Divine, to consider one option, may well order events by their functions, purposes or uses, and then 'be present' with them according to this order, which would not be essentially a spatial order.

being immanent in the very activity of nature, their exact relation is more like 'being adjacent' than 'being of one continuous substance'. This is because, strictly speaking, dispositions and events are quite different entities, even though they are spatiotemporally continuous in their operation, and dispositions are within and give rise to all events. If we take nature *itself* as the collection of what is actual in the world, then it is only by the DDI thesis that this nature is 'that which has its source of change within itself'.²⁰ Sometimes however the dispositions themselves are regarded not only as within nature, but also as essentially natural. Certainly a natural object could not persist without its dispositions, so they are essential in that sense, but that fact does not necessarily mean that they are part of Nature as distinct from the Divine. Given the DDI thesis, a great many dispositions that are often *called* natural are in fact derivative from God. We may reflect that if God is Immanent in the world, then we would expect Immanence to be for some purpose essential to the operation of nature, and we should not be surprised if the investigations of physics have unwittingly described some of the modes of Divine operation in the world.

Having seen how God can be Immanent within nature, we must now check that this does not impair His Transcendence. This will be further discussed in section 3.4, but we establish some preliminary points here. First, Immanence should not be taken to mean that the Divine is only in natural things, as then God would not also be Transcendent, only that He is at least in nature.

Secondly, we must also see whether the Divine need change Itself essentially to keep track of a changing nature (as Process Theologies seem to imply), given that the Divine Omnipotence is present variously in many different successive changes in the world. It would appear that since objects can have changing dispositions, and since they move around in the world, the Divine would have to continually adjust Itself in response, and we would not have a true Transcendence. The problem is resolved when we note that by the DDI thesis, those changing dispositions must result from changing actualities. Similarly, any moving around in the world must be via a sequence of different actual positions. If we take the Divine Omnipotence Itself to be something like an original capacity to derive dispositions according to what is actual at each time, then this original capacity *need not be changed* as the world changes. Although the Divine acts differently at successive times, the Divine capacities to act need not change themselves to do so, as all the differences can be attributed to how actualities are different at each successive time. The original Divine Omnipotence, although present in and the first principal cause of every natural change, is thus in an important sense completely Transcendent of the changing nature.

The dispositions derivative from the Divine, however, are subsequent principal causes, and only partially transcendent of natural objects. They

²⁰ Leclerc, *seen*. [3], p. 106. See also Aristotle's 'Metaphysics' 1015a 13–15.

are transcendent in the senses that (1) they are the direct result of Divine action, and (2) they are the principal causes (dispositions) rather than instrumental causes (previous effects) of all actual change in the world, and are thus the source of those changes. They are not completely transcendent, however, in that they themselves change as the world changes. But because they are derivative rather than component dispositions, this does not mean that the Divine Itself changes.²¹

2.5 Analogies for 'providing', 'receiving' and 'retaining' dispositions

This subsection uses various analogies to illustrate the meaning of some of the processes described in the DDI thesis. These analogies are designed to show similar processes occurring in well known situations, and thus to show that their descriptions are not incoherent. The analogies are *NOT* to be taken as their literal meaning in the DDI thesis, even though they may have a long history of being used to portray that meaning.

The first analogy portrays what could be meant by something having dispositions 'according to its actuality', and is an analogy with the reception of heat and light of the sun by parts of the earth. In this process, with days and seasons etc., there is a great variety of reception by all the different geographical regions, but (since Copernicus) this is not to be attributed to variability in the sun itself. Rather, the sun is (or may be) constant, but all the variation is in the earth, its parts themselves, and in their circumstances with respect to the sun. The earth thus receives heat and light 'according to its (static) actuality'. If furthermore the name 'the sun' can include all the heat and light from it, then there is a sense in which the sun 'provides' the earth with energy by being 'immanent' in the earth's atmosphere.

Another analogy for the 'reception' of life according to actual form is the consumption of food and drink by living organisms. Here, quite clearly, the organisms receive what is necessary for their life, and they only receive it according to how their form allows them to digest the different kinds of food etc. The same food may be received quite differently by different organisms, according to their actual forms.

One essential part of the DDI thesis is that natural beings have their dispositions provided for them, but, notwithstanding this, that they can act 'as if' from themselves in an autonomous manner. Although this makes little difference to the behaviour of atoms and electrons, it is important for living creatures. We do not have an occasionalism then, with the Divine 'living through' a person. We do not have, for example, people having no influence on the time of their actions, and thus no control as agents should

21 If we were to group all derivative dispositions together, then they may perhaps be called a 'Consequent' or 'Proceeding' Divine, and this Proceeding Divine would be variable in time as envisaged in Process Theologies. The derivative dispositions in this Proceeding Divine are present continually with all natural objects, as they constitute all natural dispositions to act and react.

control their behaviour. For a living being to have its dispositions provided properly, it must be able to 'retain' them, so that it can freely use them when it sees fit. Only in this way can we have any autonomy of created beings in the face of the seeming dominance of Divine Immanence. The freedom that creatures can have is the freedom to act as they want, at times that they choose, with their actions appearing both to themselves and to others to be as if from their own nature.²²

The analogy of food consumption is again relevant here. Consumed food does not act immediately, but is stored against future use. We therefore do not say that the food is 'living through us', but that we have our life provided (in some sense) by the food. One could argue that when we act it is really the food operating, and indeed potential energy from the food is the 'principal cause' of our action. However, the energy only acts by means of 'instrumental causes': our decision to act, for example, and suitable circumstances for that action. The DDI thesis has the Divine as the original Principal Cause of natural processes, and thus, using our analogy, continually 'feeding' the world with 'energy' and powers, in order to keep it going.²³

The main point to note in this section is that there is a functional similarity between the processes of 'providing', 'receiving' and 'retaining' dispositions, and the processes of providing, receiving and retaining material things. This correspondence is a rich source of metaphors for describing Divine Immanence, but I hope to have shown in this paper that literal and non-metaphorical descriptions are also available.

3 The Theological Case

Since this is primarily a philosophical exposition, yet one concerned with theological subjects, I will be presenting only a simple outline of a theological case and the arguments for its support. As the case begins by an identification of God as Life Itself, a few words about what I mean by 'life' are in order. I take 'life' to be essentially dynamic, akin to a set of causal and dynamic powers, rather than a static entity. This means that 'life' is also in

²² A full treatment of this freedom may however depend on elucidating the operation of psychological dispositions within some non-materialist framework.

²³ It may be objected that these analogies use 'thing' talk of dispositions and life, as if they were something which could be provided, received and retained, just as we can provide, receive and retain material things. If dispositions were in fact 'things' which could be 'handed over', then the DDI thesis would not give the true Immanence of God in nature that was discussed in the previous section. The best reply to this objection is to analyse what we mean by a 'material thing', as in ref.[9], and to see that 'things' themselves are best identified as structures of 'real dispositions' in the physical world. Rather than reducing talk of dispositions to talk of physical objects, the reverse is more accurate: we can analyse the nature of material objects in terms of dispositions that happen to be spatio-temporal distributions of propensities. Then, if dispositions do not have a determinate time of acting, they may be called 'retained dispositions' in analogy to 'retained things' because they would be effective over a finite time duration, and thus appear as enduring and 'retained' entities.

the dispositional category, although it is clearly not a simple example of this category.²⁴

It is important here to remember also the distinction between 'component' and 'derived' dispositions as presented in section 2.3. I am not considering the thesis that the Divine Life is composed or consists of natural dispositions, only that, since the Divine may have to use such dispositions in certain circumstances, God should be able to generate these 'derived dispositions' where appropriate.

3.1 Summary of an Argument

1. God is Life Itself. He thus lives from himself (in the sense of not living as a consequence of anything else).

2. God cannot make created things have life in themselves, as then they would not be distinct from Him. For suppose

(a) God did create something that lived from itself. Then

(b) That thing would have as one of its attributes life itself. So

(c) That thing would have as one of its attributes God. Thus

(d) That thing would not be distinct from God.

3. There are beings (e.g. human beings) distinct from God, yet with the appearance of life.

4. God can 'provide' our life, which is our set of dispositions to act, think, and will.

5. All our life is provided by God, and there is no life apart from God. If we take the principle that 'one is at least where one acts', God would be immanent in His creation. Being eternal Life Itself, He is also transcendent of His creation.

6. God does provide our life 'in accord with what is actual about ourselves' (the DDI thesis).

7. Once our life is provided, we have to choose which dispositions to realise (using our understanding of consequences, purposes etc). This is a freedom (given also by God): to act for good or for bad purposes. The result of exercising that freedom is something actual about us, and makes us (by the DDI thesis) into what we are.

²⁴ Although not essential to the DDI thesis, some theologians such as Swedenborg hold that God's Life is not just Divine Omnipotence, but is something like Love and Wisdom Themselves, from which Omnipotence can be derived (in the sense of section 2.3). Thus, analogously to the way the DDI thesis has particular dispositions derived from Divine Omnipotence according to actual circumstances, it could be that Omnipotence is derived from the essential Love and Wisdom according to the 'spiritual circumstances'. This possibility enables the meaning of 'derived disposition' to be extended, and allows natural dispositions (and 'natural life', as sets of dispositions) to be as a whole derivable from the Divine Life Itself. The terms 'life' and 'life itself' are used here as nouns, but again they should be regarded as dispositional words referring to intrinsic capacities to love, understand and act.

8. The distinction between the transcendent God and the finite creation depends on the distinction between the actual forms of created things and their received life. Thus we have neither pantheism nor deism, but what is I hope a thorough-going theism: 'God in everything'.

9. Life with God may be Infinite Love and Wisdom, but with progressively simpler actualities, simpler and more rudimentary dispositional derivatives of this Life can be operative. The dispositions of physical objects are thus simple, as their actual forms are simple.

10. God is omnipotent in the sense that He is able to do all things from Himself, and the power of all others is derived from Him. This omnipotence is more specific than the power to do anything logically possible. Rather, since he is the source of all rules how powers operate, he always works within his own rules, according to His own Nature.

To describe God as Life Itself is to give one of His lesser known perfections, but it is a perfection because, as noted in (9), with God this Life may well consist of Love and Wisdom Themselves. Note that we are not identifying God as the sum of all finite lives, as some kind of 'world soul', or as the 'supreme holistic concept',²⁵ but as the source of all life (love and wisdom) in the world. There might not have been a world, but God would not necessarily be different in that case. That God is Life Itself is consonant with the Christian belief 'All that came to be was alive with his life' (John 1:2f), as in John 14:6. It is also presupposed by John 5:26 ('For as the Father has life in himself, so has he given to the Son to have life in himself').

The next step is to see that such a God is logically unable to make distinct beings have life in themselves. For if there were any life itself in created things, this would be Life Itself²⁶ and hence continuous with God, and that which is continuous with God is God. This is a logical consequence of God being all Life Itself, and thus cannot be regarded as a limitation of Divine Omnipotence.

Of course, this does not mean that it is *a priori* inconceivable to talk of natural things having life itself as one of their properties, and thus acting from themselves. It is only that if there is a God who is life itself, then anything distinct from him does not in fact have such a life. The validity of this inference was seen by Hume:²⁷ 'By supposing it [the present material world] to contain the principle of its order within itself, we really assert it to be God'.

God's provision of our life is logically possible, as I have attempted to show in section 2 that there are no incoherencies which render it impossible, and thus could be within the range of His omnipotence. The

25 Paul Davies *God and the New Physics*, Dent (London), 1983, p. 223.

26 The capital letters are not essential—they are only used to remind the reader.

27 David Hume *Dialogues Concerning Natural Religion*, part IV. His Philo, however, uses this validity to draw the opposite conclusion, as he continues 'and the sooner we arrive at that Divine Being, so much the better'.

logical consequence of God being life itself is thus that all our life must be provided by him, and that there is no life, of any kind, apart from him (cf. Christian belief in John 15:5 'Without me you can do nothing', and John 3:27 'A man can receive nothing, except it be given him from heaven'). Note that this means it is an error to think we live entirely from ourselves, from our own life, though perhaps an error easy²⁸ to make as it certainly appears 'as if' that were the case.

The hypothesis of Divine Dispositional Immanence is that God does provide life, and that the variability of the reception is according to some actual feature of the recipient. Some such process as this seems to be implied by the theological doctrine of life according to works (Matthew 16:27: 'He shall reward every man according to his works', and in many other places). The 'reward' here could be 'life from God', and this is an instance of the DDI thesis, if this 'life' is provided 'according to what one actually does'. In fact, it is amusing to note that this is more in agreement with the quantum mechanical version of the DDI thesis, than with the Newtonian version. For in quantum theory too, the dispositional state (the wave function) is given according to past events: the 'life' of a quantum object is 'rewarded' according to its 'works', not according to its spatial shape.

Note that in this overall theory, the 'according to' relation is used in (at least) two stages: dispositional 'life' is first provided according to spatial form and/or past events, then these dispositions act according to circumstances to produce new actual events. It is these definite historical events which are the final effects, and are what is terminal and permanent with respect to Divine Power.

3.2 The Problem of Evil

Perhaps the main theological objection to the DDI thesis (indeed to any theistic account) would be that it seems to involve God in some way in all physical processes, including those that might be random, destructive, or even evil. This is a problem if we believe that God is wholly benevolent.

As a preliminary step, I use the 'free will' defence: even with the DDI thesis, God is not 'acting through' the world, but gives all natural beings (whatever their kind) freedom and life to act as they wish.²² As Christian belief has in Matthew 5:45, 'he makes his sun rise on the evil and the good, and sends his rain on the just and the unjust'. Of course, this does not mean that 'the just and the unjust' are treated identically and have the same sets of dispositions and intentions. Rather, as they will perform different acts and have different actual forms, by the DDI principle they will have different dispositions, and then lead the different lives of their choice. Just because He sustains the consequences of many actions does not mean that

²⁸ Perhaps it is this error which is schematically portrayed in Genesis 3.5ff, as a foreseeable but avoidable mistake. To make this mistake is to argue from appearances, and to appropriate life and wisdom to oneself, to become 'as God'.

He wants them to happen that way, only that He seems to prefer continued existence of people concerned, rather than their non-existence.

We may also ask how certain beings have dispositions which tend to act contrary to the Divine intentions, given that all dispositions derive from the Divine, and given that there are no evil or contrary intentions in the Divine Life. We certainly agree that a benevolent God would permit certain contrary intentions, but wonder how these could ever persist in a universe governed by the DDI principle.²⁹ One may wonder for example how selfish dispositions could be sustained, when there is no selfishness in God. I believe that the answer lies in seeing that certain dispositions, to look after oneself for example, have a good use in certain contexts, and may well be derivable from the Divine Life at certain stages. They only perform good uses, however, when they are coordinated and governed by prior derivative dispositions, such as intentions to be useful to others. This is the way they may be linked in the Divine Life, but it is possible that some persons may be such that they can only 'receive' the dispositions to look after oneself, and not the prior dispositions that are supposed to govern them. If these persons are still to live, then they can only be alive with a restricted fragment of the Divine Life, a fragment that in this case will act with regard to one person only. This fragment by itself, and derivatives from it in its 'uncoordinated' state, may well be disposed contrary to the original Divine intentions. These subsequent contrary derivatives are only indirectly generated from the Divine Life, via the continued existence of the persons concerned. The Divine benevolence is maintained, provided we do not forget that these contrary dispositions are derived via the (good) disposition to give (some kind of) life to all persons, and that they are not a permanent component of the original Divine.

3.3 Does not God only provide spiritual life?

Another objection to the DDI thesis might be that we would expect the life provided by God to be only 'spiritual' and/or 'rational', and that these are completely different from the natural dispositions under discussion here, which have physical consequences. The reply is that God may well provide these kinds of life too, but, by the DDI thesis nevertheless, this only means that there would have to be corresponding spiritual or rational 'actualities' for their reception. Whether or not there are such distinct actual forms—whether humans have 'souls' and/or 'intellects'—is beyond the scope of this paper (though see notes [18, 22, 32]). In any case, since God is 'God of heaven and earth', I can see no objection to extremely simple derivatives of His power being the physical dispositions: 'All power is given unto me in heaven and in earth' (Matthew 28:18).

3.4 Theism and Pantheism

A third objection might be that nature can now no longer be properly

²⁹ I am not discussing here the problem of how evils arise in the first place: see note [1].

distinguished from God, and thus it is too easy to say '... really, nature is God'. Against this, we have all the distinctions between Source and receptacle, between Life and act, between cause and effect, and between principal cause and instrumental 'cause'.³⁰ As discussed in section 2.4, there is no identity between the categories of dispositions and of events, even though dispositions are within and give rise to all events. Nature *itself* must be taken to be the collection of finite actualities in the world, and it is only by the DDI thesis that this nature is that which has its source of change within itself. As long as we distinguish these sets of events from their received dispositions 'within', then there is no difficulty. Problems only arise when dispositions themselves are regarded not only 'as if' natural, but also *essentially* natural. As remarked above, this is a mistake easily made, for, given the DDI thesis, a great deal of what is *called* natural is in fact continually derivative from God.

3.5 Kinds of Omnipotence

It may seem that the strict application of the DDI thesis is a restriction on Divine omnipotence and freedom. Why should God not have the power to do whatever is conceivable?³¹ Why should He not do what He likes with His creation, giving as much life as He pleases to any or all beings, irrespective of their actual form, spatial shape, or past deeds? Apart from the question of whether it is 'fair' to treat different beings in such an erratic manner, to raise this objection is to ask the long-standing question of what it is (if anything) that humans in their present condition can do to receive God's 'reward'. For if there is nothing they can do, then any reward or reception must in the end be arbitrary. I think it might be generally agreed that faith without works is dead, and this dependence on works could be in accordance with the DDI thesis as suggested above, with 'what is actual' being the historical events actually performed by a being.³²

3.6 Concurrentism and Occasionalism

There have been long debates³³ concerning the relation of Divine and

30 It may seem that we have the paradox of 'double agency' discussed by Jeffrey C. Eaton in 'The Problem of Miracles and the Paradox of Double Agency' *Modern Theology* (1985) 1 pp. 211–222. Eaton suggests the solution is to see that 'God acts upon the world in such a way as to cause the world to make itself'. The DDI solution is more specific, explaining how God's (principal) agency acts according to our own (instrumental) 'agency', giving rise to the appearance of a paradoxical 'double agency' only if principal and instrumental causations are conflated.

31 In section 3.1, item 10 gives what I believe is a more satisfactory view of (non-arbitrary) Divine Omnipotence. Further discussion, however, will have to be continued elsewhere.

32 It may prove necessary here to distinguish between acts as agents and as patients, where acts of agency are those performed from the agents' own loves. This distinction, however, requires something 'spiritual' and/or 'rational' to render such loves actual and permanent as distinct from the physical events themselves, as discussed above.

33 See A. J. Freddoso 'Medieval Aristotelianism and the Case Against Secondary Causation in Nature', pp. 74–118 in T. V. Morris (ed.) *Divine and Human Action*, Cornell U.P., 1988. For more discussion see notes 4 & 12 in van Inwagen (ref. [8]).

natural causations. Aquinas has followed Aristotle in asserting that physical objects have their own powers, and that God, in his sustaining of the world, cooperates with these powers. al-Ghazali and later Malebranche, however, held that all natural powers are really God acting, so that He is the only cause of natural processes. Previous natural events are only the occasion for God acting, hence the name occasionalism.

The DDI thesis lies part way between these two views. According to it the natural powers of an object do arise on the occasion of its past events. But then these are the powers of the object, which function in an Aristotelean fashion as the nature of that object, and which science can investigate. By having in this manner two (or more) stages between the Divine source and actual events, an initial occasionalism can give rise to physical objects having real natures which can act as true causes.

4. Conclusion

One of the aims of this paper has been to present and explain the concept of 'dispositions according to actuality', and to show that it has explanatory power both in physics and theology. With the help of this concept a principle of 'Divine Dispositional Immanence' was proposed, and it was shown that if God were immanent in the world in this way, then He would be present in all changes without being essentially changed Himself. Furthermore, He would not be immanent arbitrarily, but according to a well defined order. Then, because this order is 'according to' the forms and/or actions of natural objects, immanence gives rise to physical laws which typically relate actual forms and capabilities in a regular manner.

The imagined role of God in the natural processes of the world has tended to diminish over the last few centuries, as scientists have tried to explain the causal properties of objects in terms of physical laws, and not by the direct intervention of external powers. I suggest that this is arguing from appearances: assuming (erroneously) that because natural objects appear to act from themselves, then in fact they have (or are) their own principle of activity and organisation. As shown in section 3, this cannot be the case if there is a God who is Life Itself.

It should be clear that the manner of Immanence proposed in this paper is distinct from a deism in which God 'provides the laws' of natural operation, and then either leaves the world to proceed independently, or occasionally interferes in its operation. It is also more specific than saying that God is the 'metaphysical principle' that is presupposed by all natural existences and events, as by the present hypothesis God is being given a 'more active role'. This 'active role' however is such that it almost always appears as if persons and natural objects freely acted from themselves.

In conclusion, I hope to have shown that no 'concession to irrationality'² is needed to understand the possibility of Divine Immanence, and of its consistency with physical laws.

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