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LA CREAZIONE

Editoriale

DAVID L. SCHINDLER *

È fuori dubbio che oggi si assista a una crisi di intelligibilità che assedia praticamente ogni aspetto della cultura contemporanea. Dal tracollo del matrimonio e della famiglia, al futuro postumano inaugurato da un'incontrollata bioingegneria, al cambiamento climatico e al catastrofico degrado ambientale, i segni della non-intelligibilità dell'essere, e dell'essere umano in particolare, si trovano ovunque, così come la preoccupazione che l'uomo, nella sua prometeica pretesa di dominio tecnico, si sia solamente reso schiavo di forze che non può controllare.

Il Cardinal Ratzinger, nelle sue meditazioni sulla creazione, ha scritto che per ognuna della due alternative del pensiero che abbiamo descritto c'è un modo di vivere alternativo. L'atteggiamento cristiano fondamentale è l'umiltà, una umiltà di essere, non solo un'umiltà moralistica: essere come ricevere, accettando se stessi come creati e dipendenti dall'"amore". In contrasto con questa umiltà cristiana, che riconosce l'esistenza, c'è uno tipo stranamente differente, un'umiltà che disprezza l'esistenza: gli esseri umani in se stessi non sono niente, sono scimmie nude, roditori particolarmente aggressivi, pur potendo forse far ancora qualcosa di loro. La dottrina della creazione è, perciò, inclusa inseparabilmente nella dottrina della redenzione. La dottrina della redenzione si basa sulla dottrina

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della creazione, sul “Sì” irrevocabile alla creazione. L’opposizione fondamentale istituita dalla modernità tra amare e fare si rivela essere identica all’opposizione tra essere che si fida e essere che dubita (la dimenticanza dell’essere, il rifiuto dell’essere), che si manifesta come la fiducia nel progresso, il principio della speranza, il principio della lotta di classe. In altre parole, creatività è opposta a creazione, la produzione del mondo è opposta all’esistenza della creazione.

Non appena ci si rende conto di cosa implichi questa opposizione, si vede la disperazione del prendere posizione contro la creazione. Anche la “creatività” può operare soltanto con il *creatum* della creazione data. Solo se l’essere della creazione è buono, solo se la fiducia nell’essere è fondamentalmente giustificata, gli esseri umani sono redimibili. Solo se il Redentore è anche Creatore può essere veramente redentore. Questo è il motivo per cui la questione di cosa facciamo è decisa sulla base di cosa siamo. Possiamo vincere il futuro solo se non perdiamo la creazione¹.

Tener conto di queste potenti parole significa riconoscere nelle problematiche attuali, a cui abbiamo fatto riferimento, un disordine più originario – la negazione del mondo come creazione – e una sfida profonda: rendere ancora una volta la creazione centrale per il significato del mondo.

Come poter fare questo? Cosa significa rendere la creazione intrinseca al significato di un mondo i cui modi di essere, fare e conoscere sono governati dalla tecnologia, un mondo fondato sulla *negazione* della creazione? Gli autori e gli articoli proposti qui sotto rappresentano un tentativo di rispondere a queste domande a partire da un’ampia gamma di preoccupazioni e prospettive.

David C. Schindler, nel contributo *Historical Intelligibility: on Creation and Causality*, affronta il problema dal punto di vista dell’idea di causalità, prima rifiutata da Hume e sostituita poi con un’idea puramente dinamica di causa. Tale è la visione ereditata dalla scienza moderna, una visione che finisce per disintegrare le quattro cause, rendendo impossibile qualsiasi ricerca di significato. Hume sviluppò il proprio sistema contro la

1. Cfr. J. RATZINGER, “*In the Beginning...*” *A Catholic Understanding of the Story of Creation and the Fall*, Eerdmans Grand Rapids 1995, 100 [trad. it.: *Creazione e peccato*, Edizioni Paoline, Cinisello Balsamo 1986, 56-57.

visione aristotelica della realtà che, mentre permetteva una comprensione sensata del mondo, concepiva un universo composto da specie eterne, che non lascia spazio ad alcuna novità o libertà e quindi disprezza l'importanza della storia. L'Autore sostiene che solo affermando l'assolutezza della sostanza l'intelligibilità del cosmo può essere preservata. Come unire, tuttavia, tale assolutezza con una seria considerazione della storia? L'articolo dimostra che la spiegazione della creazione nel tempo fatta da Tommaso d'Aquino concilia questi due aspetti per mezzo di una nozione sovra-temporale e sovra-spaziale di creazione, assieme alla nozione sopra-temporale di realtà che essa comporta.

Calos Granados esamina il ruolo dello Spirito Santo nella creazione secondo l'Antico Testamento nell'articolo *El espíritu de Yahvé y el dinamismo de la creación en el Antiguo Testamento*. È lo Spirito che aleggiava sopra le acque, il respiro di Dio che è dato all'essere umano, lo Spirito la cui presenza si allontana dopo la caduta. Secondo l'Antico Testamento, questa presenza dello Spirito nella creazione è intrecciata con il ruolo dello Spirito nella salvezza dell'uomo. Non si dà dicotomia o discontinuità tra creazione e alleanza, poiché lo stesso Spirito, come una forza dinamica, muove tutta la natura e la storia dal loro inizio fino al compimento ultimo. Vengono descritte quattro funzioni specifiche dello Spirito, tra loro profondamente correlate. Innanzitutto, la visione dello Spirito come messaggero che rivela la presenza di Dio nella creazione, una presenza che chiede di essere accettata e accolta dall'essere umano, fatto ad immagine di Dio. In secondo luogo, lo Spirito dona vita al mondo e sostiene l'opera della creazione grazie alla propria costante attività. Terzo, lo Spirito reca una forza di salvezza all'interno della particolare storia di Israele, portando così a perfezione il progetto della creazione. Infine, lo Spirito è visto come una potenza interiore che trasforma e ricrea la vita umana, conducendola fin dentro alla comunione con Dio.

Michael Hanby, nel suo contributo *Saving the Appearances: Creation's Gift to the Sciences*, mostra come, vivendo come se Dio non esistesse, si perda non solo la presenza di Dio, ma anche la verità del mondo. In questa luce, l'Autore riflette sulla relazione tra teologia e le scienze in generale e, in particolare, tra teologia e biologia evolutivista.

L'articolo *The Body, Witness to Creation* di Adam Cooper esplora la continuità tra creazione e redenzione. Egli fa riferimento alla visione di

Giovanni Paolo II, secondo cui il corpo è un testimone della creazione come dono fondamentale. In questa visione il corpo appare come la porta di accesso attraverso la quale il mondo creato rivela il proprio essere dono e Dio appare come il primo Datore, Padre. Infatti, il corpo parla in molti modi della propria origine trascendente e Cooper, nell'affermare questo, pone l'attenzione alla struttura sessuale di reciprocità. Cooper attinge alla visione di Angelo Scola della testimonianza nuziale e della sua comprensione della finalità comunionale del corpo. Rivelando l'esperienza dell'amore tra uomo e donna, il corpo diventa il testimone dell'amore del Creatore per l'uomo. A partire da questa comprensione della creazione come dono, Cooper passa alla rivelazione di Cristo e mostra il modo in cui Egli porta a compimento il significato della corporeità. La capacità del corpo di disvelare il dono del Padre raggiunge il punto culminante nella morte di Cristo sulla croce. È qui che appare il fine ultimo della creazione, un corpo destinato ad essere donato all'uomo e, in questa offerta, a essere reso glorioso in comunione con il Padre. L'Eucaristia, che rende visibile questo dono di Cristo al mondo, è il luogo in cui il Corpo rivela il significato della creazione come dono perfetto, accolto e corrisposto nell'amore del Padre e del Figlio.

Conor Cunningham inizia il suo articolo dal titolo *Naturalizing Naturalism and Materialism's Ghosts* analizzando il concetto di naturalismo. Anche accettando un naturalismo metodologico (aspetto, questo, che richiederebbe ulteriori discussioni), Cunningham rifiuta l'interpretazione ontologica di naturalismo (che chiama anche naturalismo riduzionista), che considera la natura come un tutto autosufficiente, escludendo in questo modo qualsiasi intervento divino. Secondo questa visione, la scienza diventa la misura di tutte le cose e la filosofia è soltanto a suo servizio. Cunningham, a questo punto, studia le conseguenze principali che sorgono da tale posizione filosofica e passa a studiare la relazione della scienza con la religione e la dottrina della creazione. Paradossalmente, i naturalisti finiscono col distruggere la natura. Solo l'accettazione del posto speciale che la persona occupa all'interno della natura è in grado di "naturalizzare" la natura, ovvero, di realizzarla, per svelare alla natura a se stessa.

Simon Oliver, nel suo *Physics, Creation and the Trinity*, pone l'accento sul nesso tra il movimento della creazione e il dinamismo del Dio Trini-

tario. Dopo aver mostrato come un Dio monadico sarebbe incapace di creare, Oliver evidenzia – seguendo soprattutto Tommaso e Balthasar – il legame tra creazione ex nihilo e il Dio relazionale. A partire da questo punto di vista, viene stabilito un collegamento tra le eterne emanazioni dinamiche all'interno della Trinità e il movimento cosmico, che ci permette di concepire quest'ultimo come fondamentalmente relazionale.

Infine, nell'articolo *Ironic Creation*, Johnatan Lear pone l'attenzione ad un'analisi antropologica della creatività attraverso la descrizione dell'ironia. Basandosi sulla descrizione che Kierkegaard offre dell'esperienza ironica e attingendo al metodo socratico, Lear descrive un particolare atto creativo, l'ironia appunto, specifico dell'essere umano. In questo modo, l'analisi di Lear si pone come un'ottima integrazione dell'intera pubblicazione, anticipando un importante aspetto della fenomenologia della creatività.

Le diverse voci raccolte in questo numero, che guardano alla creazione da differenti punti di vista, sono tentativi di far luce su una questione così cruciale per la cultura odierna. L'autoreferenzialità della società contemporanea ha mostrato negli ultimi anni di essere molto debole. Il vero terreno comune che è necessario trovare per vivere insieme consiste, infatti, in una radice comune: la comune origine che si trova nel Creatore.

[Traduzione italiana di Francesco Pesce]

ARTICOLI

Historical Intelligibility: On Creation and Causality

DAVID C. SCHINDLER *

When David Hume denied the objective basis for the concept of causality in the eighteenth century, a denial that sent forth philosophical waves forceful enough to wake the sleeping giant, Immanuel Kant, it appeared that he was upsetting a tradition as old as philosophy itself. Even more explicitly than his teacher Plato¹, Aristotle affirmed in the fourth century B.C. that the determination of causes constituted the essence of knowledge, and then proceeded to develop a theory of causality that attempted to account for the variety of ways the mind seeks to explain the real². For his part, Hume accepted the essential connection between causality and knowledge, but pointed out that this connection rests in turn on what he claimed to be an as-yet unexamined assumption, namely, that it is possible to experience causality in such a way that it would provide an empirical foundation for our claim to know. When we expose these roots to the direct light of scrutiny, Hume claimed, they wither. For Hume, this means that what we call knowledge cannot ultimately be distinguished from belief, and so an honest philosopher is in the end forced to become a skeptic. Curiously, Hume's own honesty did not reduce him to forfeiting all speech and simply wagging his finger,

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1. PLATO offers a discussion of the nature of causes especially in the *Phaedo*, 96a-102a.

2. ARISTOTLE, *Metaphysics*, 1.2. See also *Ibid.*, 1.3983a25-983b6; *Id.*, *Physics*, 2.3.

like Cratylus, the radical disciple of Heraclitus³; indeed, Hume wrote a good deal of philosophy, and not only on this topic. His skepticism did not prevent him from developing arguments on behalf of skepticism.

We will reflect on the reason for Hume's eloquent skepticism further on; for the moment, we suggest that the difference between Aristotle and Hume on the question of knowledge and causality is not due *in the first place* to the degree of "optimism" regarding the stability of things in themselves, on the one hand, or regarding the adequacy of the human mind, on the other. Instead, as we will propose in this essay, their differences in these matters stem more fundamentally from a transformation in the meaning of causality, which appears to have taken place over the course of the sixteenth and seventeenth centuries, and which in turn betrays a fundamental shift in the meaning of being⁴. This shift may be described as a reductive temporalizing of being. While this transformation succeeds in giving a new weight to history, we will see that it entails a notion of cause that combines a radical skepticism with a positivistic empiricism. One does not need to be particularly gifted with powers of observation to see that this superficial certainty coincident with a profound anxiety characterizes the temper of our age still. But to respond to the problem that this notion of causality represents, it will not do to eliminate the philosophical significance of history and simply reject the "temporalizing" of being altogether⁵, not least of all because the significance of history is one of the fruits of Christianity. Not only is salvation effected in history – in contrast to the teaching of the neoplatonic tradition for example – but the being of the world is *created in time*, and this origin cannot but leave an indelible stamp on its most fundamental meaning.

The question we intend to address in the present essay is how the doctrine of creation allows the affirmation of the historical dimension of being without sacrificing intelligibility. In the sections that follow, we will

3. See ARISTOTLE, *Metaphysics*... cit., 4.5 1010a10-15.

4. K. SCHMITZ, "Analysis by Principles and Analysis by Elements", in *The Texture of Being*, The Catholic University of America Press, Washington D.C. 2007, 21-36.

5. One of the most classic arguments against the degeneration of philosophy into history can be found in L. STRAUSS *Natural Right and History*, University of Chicago Press, Chicago 1965. There is arguably a connection between Strauss's rejection of history and his insistence on keeping reason and revelation separate.

begin by reflecting on the meaning of causality in Hume in contrast to the classical notion of causality represented by Aristotle, in order to show how it undermines intelligibility, and does so even more radically than Hume himself acknowledged. We will then argue for the need to maintain an integrated notion of causality, which will present us in the end with two alternatives: either we affirm, as did Aristotle, the unchanging permanence of forms in the manner of eternal species, or we affirm the supra-temporal and –spatial notion of creation, along with a supra-formal notion of act that it implies, which is compatible with genuine change in the historical order. In other words, acknowledging the genuine reality of history forces a choice between the collapse of intelligibility, on the one hand, or a metaphysics of creation on the other.

I. In a succinct account of the argument he first presented in the *Treatise on Human Nature*⁶, David Hume claims that the “cause-effect” relation possesses three essential elements: first, *contingency* in time and place (i.e., cause and effect must be immediately “adjacent” to one another, both temporally and spatially); second, *priority* in time of the cause to the effect; and, third, the *constant conjunction* of the two, that is, the unvarying experience that «every object like the cause, produces always some object like the effect»⁷. For our purposes, the first thing to notice about this description is that it takes for granted the essentially “dynamic” character of causality. In other words, it thinks of the causal relation as an *event* that takes place in *time*, and indeed is defined precisely by its temporal succession. It is significant that what Hume presents here as the paradigm of such a relation is the collision of billiard balls. His view of causality reflects a change that occurred perhaps most decisively with Galileo, even if the seeds of this change go back much earlier⁸. In this change, a

6. As an attempt to draw attention to the work that he lamented «fell *dead-born from the press*, without reaching such distinction as even to excite a murmur among the zealots», David Hume published an anonymous review of his own work, entitled *An Abstract of A Treatise on Human Nature*, published in D. HUME, *An Enquiry Concerning Human Understanding*, Hackett Publishing Company, Indianapolis 1993², 125–38.

7. *Ibid.*, 129.

8. One could point, for example, to the reductive emphasis on a kind of efficient causality in late scholastic nominalism, to the univocal notion of being in Scotus, which

dynamic sense of cause came to take the place of the classical view, which, as we will explain in a moment, could be more properly characterized as an “ontological” sense. The word “dynamic,” here, is meant to capture two features of this new interpretation of cause. In the first place, it indicates that this view conceives of cause principally as a kind of motion; secondly, if the content of this relation is motion, that which brings it about is simply a producer of motion, i.e., it is *force*⁹. In the context of this notion of cause, “explanation” comes to mean the identification of the agent or agents that initiate the event of change, and the circumstance under which it or they thus operate. An explanation is complete if all such agents for a particular change are identified, and it is called “exact” precisely to the extent to which the amount of force can be quantified and thus rendered in the form of mathematical formulae.

It is commonly said that the essential difference between the modern and classical notion of science is that the ancients pursued four causes in their search for understanding, while the moderns cast aside final causes – which Aristotle had taken to be primary – as a hindrance to the progress of the knowledge of nature, and, in doing so, lost the formal cause that always accompanies it. According to this interpretation, modern science limited itself to the material and efficient causes, conceiving of the natural world as constituted by extended matter set in motion by extrinsic forces, in the manner we described a moment ago. While this characterization is evidently not altogether false, it does not get to the heart of the matter. The reason for the change is not simply, as it were, a reduction or limitation of *attention* to some factors in the explanation of a reality to the exclusion of others. As we intend to show, the redirection of attention is itself due to a change in *understanding*.

We contrasted the dynamic view of cause with what we called an “ontological” sense. What does this mean exactly? One of the first chal-

removed the ontological foundation for a richly analogous notion of causality, to the temporalizing of the notion of cause in John Philoponus’s transformation of Aristotle, or indeed to the proto-mechanism and atomism in the very first philosophers, which Plato criticizes in the *Phaedo* and Aristotle criticizes in the *Physics*. The point, here, is not to determine the historical provenance of the change, but rather to characterize its *nature*.

9. See E. A. BURTT, *The Metaphysical Foundations of Modern Philosophical Science: A Historical and Critical Essay*, Routledge, London 1932, 89.

lenges a person tends to face in teaching undergraduates Aristotle's notion of causality is the difficulty students have in thinking of the term "cause" as referring to *things* rather than to *events*. Indeed, the Greek term that is translated as "cause," namely, *aitia*, has no verbal form that would mean what we mean by "to cause," namely, "to make something happen"¹⁰. In Aristotle's sense, a cause is not an event that produces a subsequent event, but is rather anything that accounts for a thing – what, how, or why it is. Moreover, it becomes immediately evident in Aristotle's presentation that *cause* is an essentially *analogous* term, which is to say that the term covers an essential diversity within unity or unity in diversity: the four causes that Aristotle describes are all the same in the sense that they all serve to account for the reality of a particular thing, but they do so according to orders so basically different as to be irreducible one to the other. As we will elaborate in a moment, the causes are principles that, while absolute in respect to the particular order they designate, nevertheless subsist in interdependence on the others according to a more general determinate, asymmetrical order. They describe the complex and unified ways that things *are*, and not in the first place how they *happen*. This is what it means to speak of causality in Aristotle as *ontological* as opposed to dynamic.

We are going to argue that the bracketing out of formal and final causes is a natural result of a more fundamental shift, the dis-integration of the causes from one another, the isolation and thus absolutizing of each of the respective principles in itself. This shift coincides exactly, as we will see, with the loss of the primacy of *things* in favor of a primacy of extrinsic relations, so that formal laws or patterns become the basic residence of intelligibility rather than what Aristotle called the *ousia*. In order to understand how this shift was not simply an exclusive focus on two causes, but in fact a reinterpretation of all of them on the basis of a new sense of being, it is helpful to see how even the efficient and material causes that the new science affirms underwent a transformation that stripped them of the richness they enjoyed in the earlier conception.

10. The noun *aitia* is derived from the verb *aitiaomai*, which means "to charge, accuse, censure, blame," etc. In other words, the verb means the act of alleging something or someone to be the "cause" of an event; it does not mean the act of *being* the cause of an event.

As Kenneth Schmitz explains it, whereas efficient causality originally indicated an *ontological* principle, so that it would be defined as the *communication of being* – in Aquinas’s words, «A cause is that from whose being another being follows»¹¹ – it comes in the sixteenth and seventeenth centuries «to mean an active force or impulse that initiated change by transference of energy to another, resulting in displacement of particles in a new configuration and with an accelerated or decelerated rate of motion among the particles»¹². In both cases, the notion of efficient causality indicates a relation between two entities. One of the ways we could describe the difference between these two characterizations of efficient causality, however, is that the newer understanding “exteriorizes” this relation. A communication implies – as we will explain further in relation to formal causality – a sharing, which means that there is some (identically) one “thing” in common uniting the two sharers. What the two *are* individually includes, then, the reality in which they are united. In the modern conception of efficiency, by contrast, there is no sharing: force is precisely an *extrinsic* imposition of determination¹³.

Similarly, the material cause, in the older analysis, did not indicate an individual entity, but a principle, specifically that “out of which” a thing was, a principle that makes sense only in relation to an “into which,” so to speak. In other words, matter was understood as potency, which for Aristotle always relates to some actuality, and the potency exhibits different levels of determinacy at different levels of being. Thus, at the higher levels, the material cause would represent a relatively formed substance, a physical body, which possesses in itself a particular nature but which is still capable of being formed (not in a separate temporal moment, but ontologically relative to a higher nature) at a higher level of being. At the lowest level, it is “prime matter,” no substance at all in itself but rather the pure capacity to receive determination. Regardless of the level, in this older view material cause *always* has a relationship to an actuality distinct from it. In other words, it is not intelligible, and does not have its

11. AQUINAS, *De principiis naturae*, J.J. PAUSON (ed.), Société Philosophique, Fribourg, 1950, trans. V.J. BOURKE, quoted in SCHMITZ, “Analysis by Principles ...” cit., 34.

12. SCHMITZ, “Analysis by Principles ...” cit., 34.

13. See Aristotle’s discussion of violent motion as change resulting from an external principle in ARISTOTLE, *Physics*, 8.4. Cf. ID., *Nicomachean Ethics*, 3.1 1110a1-5.

existence, merely in itself, but only as itself in relation to a determining act that is distinct from it. To put it even more simply, matter is relatively determinate openness, or receptivity, to order. This view of matter contrasts sharply with, say, the Cartesian view of “*res extensa*,” which possesses no such openness. It is, rather, opaque “stuff,” it designates inert *objects* of the forces that push and pull it in one way or another. In this case, we can see that it is still possible to affirm what we did above, namely, that matter is not intelligible *in itself*, but only in relation to what is distinct from it – in this case, force – and yet now the meaning of this affirmation changes by virtue of the new context: while in the first case matter *itself* receives meaning insofar as it relates to actuality, and does so because it *itself* is a potentiality on which actuality depends, in the second case matter remains always *outside* of meaning, just as meaning remains outside of matter.

But it is not only the efficient and material causes that are carried over into the newer analysis in a transformed state. It is important to see that form and finality are likewise present, though equally changed. Regarding formal cause: in both the older and the newer understanding, form represents a kind of determination or intelligible order. The two differ most directly in the “place” of that determination, though this difference has immediate implications for the nature of that order. In the classical understanding, form determined a being *from within*; it is an internal principle of order, because it is “that by which a thing has existence” and that which “makes something to be actually”¹⁴. Aristotle observed that form is most directly connected to nature precisely because he defined nature as an internal principle of change and rest. Now, the association of form with actuality is crucial. There can be no act without *something* that is actualized, and that thing must possess the specific potentiality for the actuality of a particular form, a potentiality that is distinct from the form that actualizes it. There is a connection between the rejection of the subsistence of forms as such and the interpretation of them as actuality. The meaning of form as *act* depends on the meaning of matter as potency. Only if we understand them both thus in relation to one another are we able to affirm the determination or intelligibility

14. SCHMITZ, “Analysis by Principles ...” cit., 33.

that form provides as *internal* to the being in question. Now, because, as we have just seen, the modern view of causality no longer thinks of matter in terms of potency, it is no longer possible within this conception to think of order as anything but *extrinsic* to things. “Formal” comes to mean separation from any particular content. In this case, it is of course natural, indeed necessary, to conceive of order in terms of law, or extrinsic pattern or structure, which, *precisely because* it is no longer understood analogically, comes to be expressed in terms of mathematics. It is not accidental that Aristotle, directly after presenting his most elaborate discussion of the nature of causality in *Physics* II, distinguishes the one who studies the natural world specifically from the *mathematician* along these lines: while both study form, the latter studies it as *separate* from natural bodies and thus in abstraction from any relation to motion, motion being in its principal sense the activity that springs from the internal principle that defines things: i.e., their nature¹⁵.

Now, if one is willing to admit that modern science retains formal causality, even if in an altered form, it would seem difficult to affirm that any trace of final cause remains, not least because those in whom modern science most clearly “come to be” explicitly understood themselves to be *rejecting* final causality¹⁶. While it is clearly true that one of the things that most defines the revolution in understanding we have been describing is the attempt to abolish teleology from scientific accounts, final causality nevertheless stubbornly refuses to leave. We see this stubbornness in two ways. In the first place, as Robert Spaemann has shown, even analysis carried out strictly in the terms of mechanistic causality nevertheless has to isolate causes and effects, removing them from a literally endless continuum of possibly significant facts. Such an isolation cannot occur without some reference to final causality, since causes stand out as causes only in relation to the relevant effect that they are taken to produce¹⁷.

15. ARISTOTLE, *Physics*... cit., 2.2.

16. See, for example, F. BACON, *Novum Organum*, book 2, aphorism 2: «It is a correct position that “true knowledge is knowledge by causes”. And causes again are not improperly distributed into four kinds: the material, the formal, the efficient, and the final. But of these the final cause rather corrupts than advances the sciences, except such as have to do with human action».

17. R. SPAEMANN, *Die Frage Wozu?*, Piper-Verlag, Munich 1981, 243–49.

If we eliminated even this minimalistic teleology, we would simply have no understanding whatsoever. Intelligibility of *any sort* always requires at least some modicum of purpose – which is a plausible way of interpreting Plato’s claim that whatever we understand, we invariably understand by reference to the good¹⁸.

At a more general level, final causality remains in modern science by virtue of the fact that science is a human activity, and there is no human activity that occurs without some reference to purpose, however implicit. Thus, if final causality is removed from the inner constitution of things, it nevertheless has to go somewhere, as it were. The purpose of modern science and therefore the source of its intelligibility according to its founders is the improvement of the human estate. Scientific study and the gathering of data makes sense insofar as it serves this larger goal. For Aristotle, by contrast, the purpose of science is the science itself, or in other words, it is good – indeed arguably one of the highest human goods – simply to know. What is crucial to see in relation to our general argument is that, in *this* case, the final end of human activity perfectly coincides with the final end of things themselves, insofar as absolutizing knowledge means affirming the intrinsic meaning of things, the simple integrity of the way things are. Conversely, there is a necessary connection between depriving things of an internal finality and subordinating them, not to the act of knowledge (because knowledge as such does not subordinate), but to human praxis: if we make the improvement of the human estate the end of science, we displace the intelligibility of things themselves, and the more we reduce the meaning of things to data to be gathered, the more suitable they become to be used as instruments of human praxis.

The point of the foregoing, in short, is to see that the essence of the scientific revolution, viewed specifically in relation to the issue of causality, is not that it retains only some of Aristotle’s causes and rejects others, but that it retains *all* of them in some sense even while it radically transforms the meaning of each. What we wish to suggest is that this transformation is not arbitrary, but itself reflects a change in the understanding of being. The next point in our argument, however, is to show

18. PLATO, *Republic* VI, 505e-506a.

that the meaning of each of the causes changes, and indeed *has* to change, precisely to the extent that each is interpreted in abstraction from the others. More precisely – because there is a sense of course in which any act of understanding involves some kind of abstraction – the change occurs insofar as the causes are no longer understood as *intrinsically dependent* on one another, so that one would have to understand the other causes at least implicitly in order to have a proper understanding of each one individually. The transformation at issue can be described as the disintegration of the causes. In order to see this it is necessary to consider in what sense the causes depend in each case on an implicit reference to the whole for their own integrity. We will then go on to consider, in the fourth section, what sense of being is required for an integrated notion of causality and the “conditions of possibility” for this sense of being.

II. Let us briefly consider each of the causes in turn with a view to at least some aspect of their interdependence¹⁹. As we saw above, classically understood, the efficient cause is not a force that sets a mechanistic event in motion, but in the first place a *communication of being*: the paradigm of such causality for Aristotle would be the generation of progeny; for Aquinas – as we will explore further in a moment – the only “instance” of efficient causality in the strictest sense, which establishes the meaning for every other analogical instance, is God’s act of creation. This act is a communication of being *simpliciter*. It is worth pointing out that, in contrast to the modern notion of cause which is necessarily a temporal event, this act designates in the first place an ontological relationship; it is not a change that occurs within the world. Now, setting aside the act of creation for a moment, and considering efficient causality in a general sense, the word ‘communication’ implies that something is shared, which as we suggested above means that there is some unity between the cause and the effect. This unity lies in the *form*: a father and mother “cause” a child by passing on to him the human form, and they have a unity with

19. The discussion that follows is not meant to be an exhaustive account of the interdependence of the four causes on one another; rather, it is meant only to say enough to establish the fact of that interdependence.

him because this form is in some respect identically the same. The general principle in classical thought, *omne agens agit sibi simili*, holds by virtue of this unity in form, so that there would be no unity were there no form. This means, then, that the efficient cause cannot be what it is, namely, the communication of being *sibi simili*, without reference to form: the formal cause, in other words, *belongs* to the efficient cause properly understood. If it is separated from the formal cause, the efficient cause cannot *communicate* anything, but can only transfer energy, which, precisely because it is necessarily extrinsic in this case, takes the form of *force*²⁰.

While matter in the modern conception means mere extension in space, and so designates “physicality,” we might say, bereft of any inherent qualities apart from measurability, matter in the classical understanding was an essentially relational term. Specifically, as a potency, it always referred in some sense to form or actuality, in two respects. On the one hand, matter is, in itself, *aptitude* for form, so that, as we explained above, its intelligibility derives in part from the form that actualizes it and thus determines it in a certain way. Matter is openness upwards, we might say. On the other hand, what is potentiality in one respect will always be actuality in another: the body that represents the material cause of a living organism with respect to its animating principle, namely, the form or soul, is itself the form with respect to its own material principles, namely, the flesh, blood, and bones, and so on down the line. In this sense, matter – understood as formed body – will always have a qualitatively determined *nature*, in one respect, even while it will remain in another respect open to higher determinations. Although this inference was rarely drawn in classical accounts, it follows in fact that the more relatively determinate matter is, the more receptive it is capable of being for a higher form. But this means that, if matter is defined as a potency for form, the higher, more organized instances of matter, which by virtue of their complexity are more capable of receiving higher-order actualities, represent more fully *what* matter is than the lower instances. Thus, for example, a human body is a better representative of the nature of matter than, say, a stone,

20. For a more thorough discussion of this issue, see D. C. SCHINDLER, “Truth and the Christian Imagination: The Reformation of Causality and the Iconoclasm of the Spirit”, in *Communio* (Winter 2006), 521–39.

which has little intrinsic potency to receive form²¹. Thus, in short, we do not speak of matter, simply, as a thing in itself, but always of the material principle *of* a particular being. The natural being as a whole is in each case the subject, the fundamental reference point, in relation to which we are able to judge what in fact the material cause is. The material cause alone, without any reference to form or nature, would be simply unintelligible.

Next, we may consider the dependence of form on matter. The key to this dependence is that, if form is not the actualization of some potency, as we noted above, it cannot be the *intrinsic principle* that it in fact is. Instead, it becomes an abstract formality, so to speak, which must remain by definition superficial, since it does not bear any internal relationship to the thing of which it is the form. In other words, it necessarily turns into a purely extrinsic structure, pattern, or law²². We thus no longer speak of *things* as *formed*, in the sense of being “in-formed,” but rather we speak of form as the external patterns *to which* things are *con-formed*. To speak of form as an internal principle requires, once again, a reference to a real being – or as Aristotle puts it, a “natural body” – *of* which it is the form, and a real being is such only by virtue of the relation between form and matter: “nature is twofold, and is both form and matter”²³. We can explain this essential relation by saying that, in order for form to be internal to a being, it must be *received into* it, and it can only be thus received if there is an *intrinsic potency* for that actuality, i.e., if there

21. It would be interesting to compare prime matter to organized body in relation to the question which best reveals the *meaning* of matter: while prime matter would seem most receptive in one sense, insofar as it is a kind of pure indeterminacy, it nevertheless is not immediately capable of being actualized at a high level precisely because of that very indeterminacy. A full reflection on this issue lies beyond the scope of this paper.

22. See, for example, BACON’s observation in the *Novum Organum*, book 2, aphorism 2, which is the continuation of the passage we quoted in footnote 16: «Nor have I forgotten that in a former passage I noted and corrected as an error of the human mind the opinion that forms give existence. For though in nature nothing really exists besides individual bodies, performing pure individual acts according to a fixed law, yet in philosophy this very law, and the investigation, discovery, and explanation of it, is the foundation as well of knowledge as of operation. And it is this law with its clauses that I mean when I speak of *forms*, a name which I the rather adopt because it has grown into use and become familiar».

23. ARISTOTLE, *Physics*... cit., 2.2; J. SACHS, *Aristotle’s Physics: A Guided Study*, Rutgers University Press, New Brunswick 1995, 52.

is a material principle understood as we have just described it. There is thus a relationship of reciprocal dependence between form and matter: matter, as a *potency for*, implies the priority of form, and form cannot exist as such except as received by matter. This means that there cannot be a temporal priority of one or the other, so that they are then added together in a subsequent “moment.” Instead, they must always already be involved with one another, so to speak. This is why Aristotle presents organic form, which is always already intrinsically related to its matter, as the paradigm, and treats the form of an artifact, which is to some degree simply imposed on matter that is in a certain respect independent of it, as an analogous sense of the term²⁴. An intrinsic relation to matter is part of the *meaning* of form in its strict sense.

As for final causality, it represents an explanation of the *meaning* of things, and not simply an arbitrary imposition, only insofar as teleology is taken to be most fundamentally *intrinsic*. If there is no intrinsic relationship between a being and the purpose it serves, if, in other words, the purpose is simply extrinsic to a being, then it becomes wholly accidental that it happens to be this particular being that serves the purpose, and not some other. Things become interchangeable with respect to their purpose, and represent nothing more than instruments in its service. The purpose, in this case, does not illuminate the meaning of the being, which is to say it has no strictly *theoretical* role, but as we saw above dissolves into a kind of positivistic pragmatism that is never truly self-explicating but only ever endlessly self-justifying, and indeed, always in terms other than itself. For teleology to have an essentially theoretical dimension, the end must be internal, which is another way of saying that natural things must be their own end. Aristotle coined the term “*entelechia*” to refer to organisms: they possess (*echein*) their end (*telos*) in (*en*) themselves. But this simply means that the first purpose of an organism is to be itself, to actualize as fully as possible *what* it is. It follows, then, that final causality, if it is to be something other than external manipulation, requires a reference to formal causality, the essential “whatness” of a thing or its most basic determinate act, and more specifically to an *internal* notion of form, which as we saw above, is such only with reference to an internal

24. *Ibid.*, 51.

potency. In the paradigmatic case of the organism, once again, the “reference” is so intrinsic as to be materially identical, to represent one and the same thing under a different aspect²⁵. Finality as a *cause* is inconceivable without formal causality.

III. There would be other ways to show the interdependence of the four causes, but the brief account given already establishes the principle that the causes cannot be understood in isolation from one another, so that to separate them is to distort them. Before we raise the issue of what understanding of being is required in order to be able to affirm an integrated notion of causality, we will first consider the implications of this distortion with respect to the intelligibility of things more generally. We have suggested that the modern view of causality did not so much eliminate some of the causes as it did reinterpret them in a dynamic, rather than an ontological, sense. We wish to argue now that this reinterpretation in fact undermines their intelligibility more radically than is typically acknowledged.

As we saw at the outset, Hume affirmed the dependence of knowledge on causality, which he in turn described as the regular succession of contiguous events in time. Having described things thus, he points out that the mind has no access to any necessary connection between the two, but only to the one event that precedes and the other that follows. This exhaustively “dynamic” notion of causality is, we might say, a paradigmatic expression of the disintegration we have been describing. Unities are always *supra*-temporal – which does not mean that they do not exist *in* time, but only that their existence in time does not account for the whole of their reality. An identity, which is a type of unity, remains numerically the same over the course of a multiplicity of moments, which means that its reality transcends each one of those moments and so cannot be reduced to it. To *define* causality in strictly temporal terms is not to show that there is no basis for knowledge, but in fact to take the absence of that basis for granted at the outset, which is of course to beg the question.

25. ARISTOTLE, *Physics*... cit., 2.7.

It is interesting that Hume does not link knowledge to essences or forms, or to intrinsic teleology, all of which imply a unity, but rather to the physical inter-action between things, an event. As a merely physio-temporal event, this encounter – if the word is appropriate at all in this context – is wholly extrinsic. Nothing about the inter-action reveals the meaning of either of the things involved, or bears significantly on that meaning. Indeed, it is wholly a matter of indifference *what* the cause and effect are in themselves, but only *that* they happen to connect at this point in time and space: there is no *communication* (of form), which means that the effect tells us nothing about the nature of the cause. Now, it follows directly from this that there can be no *essential necessity* to this relation. If the two things relate to one another in a *wholly* extrinsic fashion, their inter-action will be altogether *accidental*, or in other words arbitrary in relation to the meaning of things, regardless of the empirical reliability of the law to which they appear to conform. In this case, the regularity of their inter-action – should it happen indeed to exhibit some regularity – is simply a matter of probability, a likelihood that always only asymptotically *approaches* necessity as something extrinsic to itself. Given Hume’s definition of causality, he cannot *but* deny any essential difference between what we call knowledge and the belief based on custom and constantly reinforced by experience.

But Hume did not draw the full implications of his starting assumptions; more needs to be said here. It is not merely the necessity of the connection between cause and effect that gets lost the moment we reductively temporalize the relation and see them therefore as wholly extrinsically connected, but intelligibility itself founders at its root: we are in this case not simply unable to *predict* things with the absolute certainty that necessity offers, but the very possibility of any sort of understanding is undermined as well. As we mentioned above with reference to Spaemann, even a wholly “positivistic” view of causality derives whatever intelligibility it possesses from an implicit affirmation of teleology. One cannot distinguish a *cause* from the essentially infinite number of conditions preceding the effect without some minimal reference to final causality: this reality differs from the others in that it acts “for the sake of” this effect, its activity has the *purpose* of producing such and such an effect. If there is nothing but wholly extrinsic relations, it would make no

sense to distinguish a “post hoc, propter hoc” fallacy from a valid analysis of a causal relation, because there would *be* only “posts” and no “propter.” Thus, not only would we lack a basis for attributing any *necessity* to the connection between cause and effect, but we would in fact have no way of identifying any causes, which means we would also lose the ability to identify something as an effect, insofar as doing so depends on identifying a cause. Along with necessity, there would be no such thing as probability.

At an even more fundamental level, the reduction of cause to an event not only precludes the possibility of knowing the necessity or even probability governing the relations between things, but it eliminates the understanding of the things themselves at all, since no “thing” whatsoever can be a “thing” unless it is an intelligible whole. If there is no form as an internal principle of unity that identifies a thing as what it is and distinguishes it from everything it is not by gathering up the multiplicity of parts and aspects and ordering them around a center, then the mind seeking understanding has, as it were, no place to go in its relation to things. It is interesting to note that, addressing the question of the possibility of knowledge, Hume immediately speaks of the connection *between* things, and considers whether it is possible to affirm necessity of this connection. But he does not first raise the question of our knowledge of the things themselves that connect. He evidently takes it for granted that we are able to identify the first billiard ball, and then the second, even if he rejects the claim that we can identify anything in experience that we could call their causal connection. It is only later that he introduces the issue of substance, and of course denies that we can have knowledge of it, since our experience of things is limited to their accidents: our relation to things is, indeed, just as extrinsic as the colliding billiard balls. For Hume, the mind seeking understanding is drawn outward, away from things and toward their external relationships.

The implications of this turn however extend further than Hume seems to have realized. He denies substance, and speaks instead of accidents; he denies knowledge, and speaks instead of experiences and impressions that give rise to belief of varying degrees of compelling power. But isn't an accident also an object with its own form, a meaningful whole that is not merely the sum of its parts, and couldn't we say the

same for any experience or impression, not to mention the notion of knowledge or belief? The strictures that Hume demands would render unintelligible the very language in which he demands them.

Or apparently, at any rate. It turns out that a strategy remains for salvaging at least a *kind* of intelligibility in the face of a fundamental skepticism with respect to any intelligibility, whether in the world or in the soul. In a book published in 1969 entitled *Two Logics*²⁶, Henry Veatch describes the supplanting of Aristotelian categorical logic by the symbolic logic represented by Russell and Whitehead, and claims that much more was going on here than simply the expansion of logic's scope and power: symbolic logic, according to Veatch, is essentially a "relating-logic," which in contrast to the Aristotelian "what-logic," is "unable to say what anything is". Although we unfortunately cannot enter into the details of his interesting argument, it is helpful, in relation to our theme, to note one feature of it. At the heart of this transition to symbolic logic, which we find for example in the analytic philosophy that dominates the Anglo-American academy, lies a radical reconception of the basic instance of human thought, namely, the simple proposition: S is P. Whereas in the traditional view, this presented an articulation of the subject and its accident, whereby the accident reveals something about the nature or the reality of the subject, in the modern view this simple proposition represents a relation between two terms, which relationship is conceived as a logical function. In this case, the predicate is not understood to disclose something about the meaning of the subject, but instead represents simply a property that is posited as belonging in this case to the subject. In other words, it assumes an extrinsic relationship between the two terms, so that either the predicate is already contained in the subject and so is not different from it (analytic statement), or the predicate is separate from the subject and can be connected either formally by the logic of categories (synthetic a priori) or materially by experience (synthetic a posteriori). But this way of conceiving things leaves us, on the one hand, the sphere of necessity that is limited to a logical analysis of

26. H. VEATCH, *Two Logics: The Conflict Between Classical and Neo-Analytical Philosophy*, Northwestern University Press, Evanston 1969.

“what we mean” by the language we use to describe the world or the necessary relations between concepts, and on the other hand the contingent sphere of empirical facts, which can be recorded and organized according to patterns (i.e., form understood extrinsically as law) but not intellectually *penetrated* as an essential, intrinsic meaning (form as ontological principle). Intelligibility is therefore “saved” in this case by separating thought altogether from things, allowing it the much more modest goal of coherence and consistency, and subsequently extrinsically re-connecting it to the world only in the apparently equally modest mode of a positivistic empiricism. It is just this that we find in both in Hume and in a more sophisticated form in Kant. What Veatch does not say here, but what our previous discussion allows us to see, is that the root of this development in twentieth century philosophy is a disintegration of the notion of cause; a metaphysical problem lies at the basis of the epistemological problem.

The question often arises, with respect to this detachment of thought from the world, which is itself a reflection of the displacement of intelligible form from the center of things, whether it does not harbor within itself outright contradiction, along the lines we indicated above with respect to Hume: even within this apparently modest self-limitation of reason, he necessarily speaks of the *nature* of concepts, of propositions, of reason, and even of the things whose nature is unknown to us. Indeed, this is clearly self-contradictory. But it is crucial to see why the very separation of thought from the world renders this charge gratuitous, at least in a certain respect. The problem in a nutshell is that this contradiction lies too deep to create a difficulty for self-limiting thought; it lies, we might say, in the very realm that reason restrains itself from entering. The result of this self-restraint is that a new criterion for judgment takes the place of truth, namely, a necessarily utilitarian concept of the good. Although this pragmatism cannot justify itself theoretically, it can always persuade itself to take solace in the fact that the essentially contemplative vision of truth presupposed by the ancient science cannot justify itself practically – at least not according to the terms set by pragmatism: i.e., it does not appear to produce anything of immediately utilitarian benefit. The key is that, along with its being shifted from a theoretical to a pragmatic register, the cri-

terion for judgment is simultaneously “temporalized,” in the sense that an idea justifies itself by pointing to its consequences *here* and *now*²⁷.

What is at stake in the question of the proper measure of truth is nothing short of the basic meaning of the cosmos, the meaning of human nature, and indeed ultimately as we will see in a moment the meaning of the God who created both. The fragmentation of causality not only eliminates necessity, but it undermines intelligibility so radically that intelligibility no longer matters, so radically that intelligibility can be “used,” even if it does not in fact have a basis in reality or ultimately mean anything, as long as its use brings about desired results – “desired” meaning here only what the utterly arbitrarily imposed final cause determines it to mean in any given case²⁸. This is a nihilism far more profound than that expressed by Friedrich Nietzsche, who suffered extreme loneliness as a result of his convictions. It is a nihilism compatible with the various truth claims required for efficient living in the contemporary world. The fragmentation of causality puts reality wholly at the service of human aims, and indeed at the service of aims that have become so bourgeois they are no longer human, but merely “all too human”.

IV. To respond to this nihilism, we must ask what understanding of being is necessary for an integrated notion of causality. As we have seen, each of the causes has its proper meaning only in relation to the others. But this interdependence would seem to create a logical difficulty: if A cannot be A without B, but B cannot be B without A, then it would seem to be impossible to have either, for each would await the other to attain to its own meaning, which entails an infinite regress with no absolute place to start. But if it is true that one could never move sequentially from A to

27. There is an analogy between this pragmatism and the replacement of philosophy by sociology in political theory represented by Montesquieu. According to P. Manent, this replacement, which he takes to be the precise moment of the emergence of the modern age, does not justify itself theoretically in comparison with the ancient world, but simply supplants it on the strength of the authority of the “present moment”. History takes the place of nature. See P. MANENT, *The City of Man*, trans. M. A. LEPAIN, Princeton University Press, Princeton 1998, 11–49.

28. For an elaboration of the significance and implications of the shift from a theoretical to a pragmatic criterion for judgment, see my *Plato’s Critique of Impure Reason*, The Catholic University of America Press, Washington D.C. 2008, 1–21.

B, or from B to A, insofar as the two are reciprocally dependent, it is possible to have both of them at the same time, or in other words to take as the starting point the reality of a *whole* in which A and B are reciprocally dependent as constitutive parts. And here we are brought to the sense of being required for an integrated notion of causality: as Aristotle saw, the essential meaning of being is *substance*; what are absolute are *concrete, natural things*, the most basic of which are organisms, and the most derivative of which are in some sense elements and in another sense artifacts²⁹. A substance is a whole, which is simultaneously complex and irreducibly one. A substance cannot be divided, properly speaking, without ceasing to be the substance it was (homogenous elements come closest to this possibility, but for that very reason are the least deserving of the name “substance”). In it, the constitutive principles – efficiency, matter, form, and finality – interweave in a reciprocally dependent and asymmetrical manner, as we described above. They exist together in some respect “all at once”.

Now, the complex unity of substance has a difficult implication, which could scarcely be entertained today, but which follows from Aristotle’s view with strict logical necessity: it is impossible, according to this understanding of the interdependence of causes, for new forms to come to be. Aristotle affirmed the eternity of the species, and it should be clear that he could do nothing else. A whole that is in the strictest ontological sense greater than the sum of its parts cannot be “cobbled together” from those parts. Take a frog: an organism of this sort represents the integration of causality to such an extent that the efficient, formal, and final cause are in this case one and the same (it is the *frog*, the *what* of the thing, that moves itself, and it does so in order to be a frog in the fullest sense it can). The material cause, though not in any genuine sense identical to form, nevertheless remains intrinsic to it so that there never exists frogness “as such,” but only as individual frogs. Because of this integration, it would be impossible to assemble a frog in the manner of Frankenstein’s monster, and to the extent that one could approximate such a thing, it would inevitably serve an extrinsic purpose, which means it would not be an “entelechia,” as properly befits an or-

29. ARISTOTLE, *Physics*... cit., 2.1.

ganism. In a proper substance, none of the four causes, in other words, has its being, so to speak, in itself. Rather, each is a cause *of* the being in both the objective *and* subjective sense of the genitive. The substance is the absolute to which the causes are relative, it is the essential reference point for the understanding of each. Thus, for Aristotle, substance must be eternal, a frog cannot be *produced* out of something more basic, but can come only from other, already actualized, frogs. If it *did* come from something more basic, it would be reducible back to that or those most basic things, which would then represent eternal substance themselves. In this case, what *appeared* to be the reality would not be the genuine reality³⁰. Strict novelty, in any event, is impossible for Aristotle; even the creation of apparently original artifacts are the expression of forms that have been derived from other more basic forms, and cannot be said to have been generated from nothing.

We thus appear to stand before a dilemma. On the one hand, we have an integrated causality that represents the condition of possibility for all intelligibility, but to affirm this would require us to accept the eternal reality of substances, for any whole greater than the sum of its parts cannot simply be constructed step by step out of its parts. But this is an essentially “static” notion of the cosmos; it denies development, and very clearly denies the possibility of anything like an evolution of species. It would seem to deny, moreover, the possibility of creation, if one thinks of this divine act as an *alternative* to the eternity of species. There

30. Interestingly, the truth of this line of argument reveals itself in Richard Dawkins’ neo-Darwinianism, as he expresses it in R. DAWKIN, *The Selfish Gene*, Oxford University Press, Oxford 2006: he explains that *genes* are the basic units of natural selection. He thus makes them the absolute to which the organisms are relative. This leads him to claim, 1) that organisms are not real in themselves, but are simply genes’ “survival machines”; 2) that organisms ought thus to be understood as instruments by which genes replicate themselves; and 3) it is genes that are (relatively) “immortal.” In other words, Dawkins does not ultimately eliminate Aristotelian substances, but simply transfers the properties of substance to mechanistically conceived units. His account fits exactly Aristotle’s criticism of the “naturalistic” pre-Socratic thinkers: «For whatever from among these [physical elements] anyone supposes to be [the nature of things that are], whether one of them or more, this one or this many he declares to be all thinghood [i.e., substance], while everything else is an attribute or condition or disposition of these, and whatever is among these he declares to be eternal (since for them there could be no change out of themselves), while the other things come into being and pass away an unlimited number of times», ARISTOTLE, *Physics*... cit., 2.1, SACHS, *Aristotle’s Physics*... cit., 50.

thus appears to be good reason to reject this understanding of being. On the other hand, actually to do so would present an even more obviously problematic implication: it would entail the dis-integration of the causes, and therefore a purely mechanistic conception of the universe and all things in it, coincident with the loss of any foundation for intelligibility, so that, if there is to be meaning at all, it is forced to fix its outer limits at the hermetically sealed borders of self-enclosed reason. What, in this situation, are we to do?

One might anticipate that it was precisely the world view brought by Christianity that undid the integration of Aristotle's eternal substances, insofar as the doctrine of creation means that *all* things in the cosmos "come to be", at least in some respect. But this would only be the case in principle if indeed the sense of being entailed in the doctrine of creation were incompatible with the absoluteness of substance. As Thomas Aquinas shows, there is no contradiction in principle between the world's being created and its being eternal. As he indicates in the short treatise *On the Eternity of the World*, it is a mistake to think that efficient causality can operate only according to temporal succession³¹. While it is true that efficient causality implies a "before" and an "after," he explains, these terms need not indicate an order of time (as they *essentially* do in Hume, and "before" him in Galileo), but can also indicate an order of nature³².

31. «First, we should show that it is not necessary that an agent cause, in this case God, precede in time that which he causes, if he should so will. This can be shown in several ways. First, no cause instantaneously producing its effect necessarily precedes the effect in time. God, however, is a cause that produces effects not through motion but instantaneously. Therefore, it is not necessary that he precede his effects in time. The first premise is proved inductively from all instantaneous changes, as, for example, with illumination and other such things. But the premise may be proved by reason as well...». AQUINAS, *On the Eternity of the World*, trans. R. T. MILLER.

32. «Further, let us even suppose that the preposition "out of" imports some affirmative order of non-being to being, as if the proposition that the creature is made out of nothing meant that the creature is made after nothing. Then this expression "after" certainly implies order, but order is of two kinds: order of time and order of nature. If, therefore, the proper and the particular does not follow from the common and the universal, it will not necessarily follow that, because the creature is made after nothing, non-being is temporally prior to the being of the creature. Rather, it suffices that non-being be prior to being by nature. Now, whatever naturally pertains to something in itself is prior to what that thing only receives from another. A creature does not have being, however, except from another, for, considered in itself, every creature is nothing, and thus, with respect to the creature, non-being is prior to being by nature.

In other words, the causality of creation does not necessarily imply an event in time, but can simply mean absolute metaphysical dependence – even in principle of eternal things. In this respect, Aquinas affirms that the Platonic notion that the world is both eternal and wholly dependent on God is not offensive to reason.

There are some who believe that Aquinas means to present this ancient view as a possibility for reason; guided by the Christian faith, however, which affirms the creation *in time* of all things and so denies the eternity of the world, we ought to reject this possibility in favor of the other reasonable possibility, namely, that all things come to be in time. If this were the case, one would wonder why he would write an entire treatise on behalf of a position he considers false³³. But there is another way to interpret Aquinas regarding this question. If we consider Aquinas's metaphysical exposition of creation in the *Summa*, we realize that, for Aquinas, this ancient philosophical notion regarding the eternity of the world is and remains in some respect *true*, even if this truth does not contradict the affirmation that all things have come to be. We are approaching the height of paradox here, but it is reason that is leading us to it. One of the constant themes in Aquinas's exposition of the notion of creation is that the proper *terminus* of God's creative act is the particular subsistent being, what Aristotle calls the substance:

Creation does not mean the building up of a composite thing from pre-existing principles; but it means that the composite is created so that it is brought into being at the same time with all of its principles³⁴.

Nor does it follow from the creature's always having existed that its being and non-being are ever simultaneous, as if the creature always existed but at some time nothing existed, for the priority is not one of time. Rather, the argument merely requires that the nature of the creature is such that, if the creature were left to itself, it would be nothing», *Ibid*.

33. Moreover, this interpretation tends toward an instrumentalist view of reason and an extrinsicist view of the relationship between reason and faith: if reason leads to one conclusion, and faith then simply introduces a different one without including a rational critique of the first, then we are left with a decidedly unThomistic dual truth theory. We intend to suggest that the truth that faith brings, which reason cannot anticipate by itself, nevertheless integrates the whole of what reason itself affirms.

34. AQUINAS, *Summa Theologica* (=ST), I.45.4ad2.

The reason for this is that we can attribute being to parts – for example, to form and to matter – only analogously insofar as they contribute to the reality of things. But being belongs in the *proper* sense «to that which has being – that is, to what subsists in its own being»³⁵. Aquinas in other words affirms Aristotle’s notion that it is *wholes*, composite beings, that are what is most real, and that other aspects of the world have their reality always *relative* to these wholes. In this respect, a human being would be more real, for example, than the genes that make him up. He is more real than an atom, or indeed even more than a rock or a tree, insofar as a human being has more independence than they. Composite wholes – whether we call them substances in Aristotle’s sense or subsistent beings in Aquinas’s – *remain absolute* in the doctrine of creation, which means that this doctrine entails an integrated notion of causality.

The question that arises, here, is whether this absoluteness of wholes presents a difficulty for the temporal coming to be of the world that is entailed in the Christian belief in creation *in time*. On the one hand, Aquinas affirms that *substances* as such imply the *transcendence* of time – «time does not measure the substance of things»³⁶ – and for this reason, because demonstration concerns the essence of things (which represents their non-temporal aspect), creation in time cannot be demonstrated. This implies that a “supra-temporal” aspect of being is essential to its intelligibility, which is what we have argued with respect to the notion of causality. Indeed, Aquinas specifically distinguishes eternity from time by the principle of wholeness: eternity is simultaneously whole, while time is not³⁷. We may infer from this that, *insofar as something is whole, and to that extent it represents something essentially greater than and irreducible to its parts, that thing transcends time*. It is important to see the implication: it is not simply a *part* of a substance – for example, the abstract form or the “ideal” reality of the thing – that transcends time, but that each individual substance must transcend time precisely to the extent that the substance represents an irreducible unity. This does not mean the thing does not exist in time, but only that its temporal reality is not the whole

35. *Ibid.*, I.45.4.

36. *Ibid.*, I.46.3 obj. 1. See also I.46.2.

37. *Ibid.*, I.10.4.

of its reality. Again, it is just this transcendence of time that makes it intelligible. But faith does not contradict reasoning; the light of faith does not obscure the light of reason. This means that the new context into which faith – and here specifically faith in the notion that the world was created *in time* – introduces the being of the world preserves the intelligibility, and therefore the time-transcending character, of being even as it transforms it. The sharpest question we must ask, then, is how does the origin *in time* of things not eliminate the supra-temporal integrity of their intelligible reality?

We cannot here explore this question in all the depth that it demands, but we may nonetheless draw principles of a response to it from Aquinas. Precisely because substance necessarily has an “all at once” quality, it cannot as we said come into being incrementally. Moreover, insofar as creation is a divine act, it does not itself take place *in time*, as a movement or a change, which always implies the succession of moments. Thus, Aquinas affirms that the world is created simultaneously with time: «Things are said to be created in the beginning of time... because together with time heaven and earth were created»³⁸. Indeed, God does not “take time”, as it were, to create, but rather «He must be considered as giving time to His effect as much as and when He willed»³⁹. It is manifestly not the case that, for example, the matter is first created as a potential to receive at a later moment the form that actualizes it. This would leave form and matter extrinsic to each other in a way that would not allow us to make sense of organic beings, the epitome of the real. To the contrary, not only is no matter present prior to God’s creation of subsistent beings, but no possibility is present – or rather, if there is a possibility it lies wholly in God’s will⁴⁰. God does not operate within the limits of the conditions of possibility, but he *gives* those conditions in giving being. It is in this sense that each real, subsistent being is created “all at once”, specifically *as a whole*.

Now, while we might be able to imagine in some distant way that God created the world together with time in the distant past, it does not

38. *Ibid.*, I.47.3ad1

39. *Ibid.*, I.46.1ad6.

40. *Ibid.*, I.46.1ad1.

seem to be the case that individual beings are created “immediately”, in the manner described. If they were, we would expect to see beings “pop up” into existence literally “out of nowhere”. Is it not the case that the beings that make up the world have come to be gradually insofar as they evidently did not exist at the beginning of the universe – something that not only modern science, but Aquinas too seems to have held?⁴¹ If this is the case, it seems to contradict the claim we have repeatedly made that substances have an absolute character that does not allow them to be reduced back to anything less than they. There are two points to make in response to this difficulty: first, the absoluteness of substance precludes a “coming to be” from below, but does not preclude a coming to be, so to speak, from above. But such a “coming to be” requires a kind of actuality that is distinct from, and indeed superior to, the actuality of form. Aquinas presents this kind of actuality in his notion of *esse*, the existence that God shares with the beings he makes be, or the act by which all forms themselves are actualized⁴². *Esse*, according to Aquinas, is formal with respect to all form because it is the actuality of all (formal) acts⁴³. In this respect, it is that to which the actuality of real beings can be reduced. It is not a potentiality out of which forms are generated “from below,” but is rather an excess, so to speak, of actuality that is limited “from below” by the forms to be actualized⁴⁴. Because *esse*, moreover, is not itself a subsistent being, but is rather a substantial-*izing* act, the reducibility of form to *esse* does not eliminate the absoluteness of individual substances. To the contrary, it is precisely what *makes* them absolute.

41. See *Ibid.*, I.46.3.

42. On the significance of the supra-formal act of being for historical intelligibility and the relationship between being and time, see F. WILHELMSSEN, *The Paradoxical Structure of Existence*, The University of Dallas Press, Irving 1970, 127-55.

43. «*Esse* is what is innermost in each and every thing, and what is deepest in them all, for it is formal in respect of all that is in a thing», AQUINAS, *ST...* cit., 1.8.1.

44. This does not imply a unilateral relationship, which would make the form nothing but a “negative” quantity in relation to the positivity of *esse*. Instead, there is a reciprocal (though asymmetrical) dependence between *esse* and the essence within the unity of God’s creative act. For a clear statement of this point, see A. WALKER, “Personal Simplicity and the *Communio Personarum*: A Creative Development of Thomas Aquinas’s Doctrine of *Esse Commune*”, in *Communio* 31 (Fall 2004), 468, n.11. See also, H.U. VON BALTHASAR, *The Glory of the Lord*, vol. V: *The Realm of Metaphysics in the Modern Age*, trans. O. DAVIES et al., Ignatius Press, San Francisco 1991, 619-24.

The second point to make is a more speculative development: it is true that no substance can exist *merely* temporally; the sheer multiplicity of time is incompatible with any sort of subsisting being. A fortiori a subsistent being does not come to be *merely* in time. Once we recognize this we are able to say that, if there is a subsistent being at all, its conditions of possibility were not given merely in the temporal moment prior to its actuality, but rather that its possibility is given simultaneously with its actuality, which transcends time by definition. What this means is that we cannot think of the coming-to-be of substances merely “horizontally”, but must rather think of them vertically as unfolding in time *from above*. The condition of possibility thus does not precede in time but rather *in nature*, and the reference point for understanding the process lies not in the first moment, and then each succeeding moment thereafter, but in the form that lies above the temporal process altogether. At the same time, of course, the form reciprocally depends on the temporal process for its coming to be in reality, but this dependence is asymmetrical: the substance’s dependence on its history lies so to speak *inside* the history’s dependence on the substance. The passage we cited above expresses this point quite nicely: God *gives time* to the effect that he creates, which we may read as generously allowing it to develop gradually into what it has always been meant to be.

The inclusion of the horizontal dimension of being within the vertical dimension allows the possibility of a kind of evolution in the biological sphere, even though it precludes a purely mechanistic account of that evolution. It should be noted that, despite claims to the contrary, evolution cannot in any event be accounted for in wholly mechanistic terms insofar as mechanism excludes the possibility of natural forms and therefore of genuine substances⁴⁵. This means, ironically, that not only are creation and evolution not opposed in principle, but in fact evolution *requires creation* to be intelligible at all as the gradual coming to be of *real beings*. And this is because, as we have seen, there can be no intelligibility of any sort without the absoluteness of substance, which the supra-

45. See H. JONAS, “Philosophical Aspects of Darwinism”, in *The Phenomenon of Life: Toward a Philosophical Biology*, Northwestern University Press, Evanston 2001, 38–63, esp. 51–52. Cf. M. HANBY, “Creation Without Creationism: Toward a Theological Critique of Darwinism”, in *Communio* (Winter 2003), 654–694.

temporal and indeed the supra-formal act of creation alone – if one does not affirm the eternity of species – makes possible. As we have come to see this acknowledgment of intelligibility requires an inversion of our normal way of thinking that limits physical being to the flux of time, and demands instead that we see time as *belonging to things*, as unfolding from above in reference to what transcends things. The physical world does indeed exist in time, but not reductively so: all real beings “stick out” ec-statically into the eternity of the God who made them from nothing and “continues” so to make them. The dis-integration of causes is a natural result of the failure to interpret creation thus metaphysically and the subsequent temporalization of being. A recovery of their integration, a restoration of the wholeness of things and thus the basis of any thinking whatsoever, will therefore require a restoration of a proper sense of being as created.

SOMMARI

L'articolo afferma che una nozione metafisica di essere come creato è necessaria per evitare, da una parte, una mera nozione dinamica di causalità, che mina ogni fondamento dell'intelligibilità del mondo, e, dall'altra, una visione statica dell'universo composto di specie eterne e senza possibilità che emergano nuove forme di vita. Innanzitutto, una visione dinamica della causalità comporta una dis-integrazione delle quattro cause e, quindi, tale dis-integrazione implica la dissoluzione di ogni motivo di senso. In secondo luogo, per garantire l'intelligibilità è necessaria l'affermazione dell'assolutezza della sostanza. Infine, l'articolo dimostra che la spiegazione della creazione *nel tempo* secondo San Tommaso è in grado di riconciliare tale assolutezza con la novità della storia grazie a una nozione sopra-formale e sopra-temporale di realtà.

This essay argues that a metaphysical notion of being as created is necessary if we are to avoid, on the one hand, a purely dynamic notion of causality, which ultimately undermines any foundation of intelligibility in the world, and, on the other hand, a ultimately static view of the universe made up of eternal species and no possibility for newly emergent forms. It first shows that a dynamic view of causality implies a dis-integration of the four causes from one another, and then

that this dis-integration implies a dissolution of any ground for meaning. Second, it argues that to preserve intelligibility requires an affirmation of the absoluteness of substance. Finally, the essay demonstrates that Aquinas's explanation of creation in time is capable of reconciling this absoluteness with the novelty of history by virtue of a supra-formal and supra-temporal notion of actuality.

L'article affirme qu'une notion métaphysique de l'être crée est nécessaire pour éviter d'une part, une simple notion dynamique de causalité, qui mine tout fondement de l'intelligibilité du monde et pour éviter d'autre part, une vision statique de l'univers composé d'espèces éternelles et sans la possibilité d'émergence de nouvelles formes de vie. En premier lieu, une vision dynamique de la causalité comporte une dés-intégration des quatre causes set une telle dés-intégration implique la dissolution de tout motif de sens. En second lieu, pour de garantir l'intelligibilité l'affirmation du caractère absolu de la substance est nécessaire. Enfin, l'article démontre que l'explication de la création *dans le temps* selon Saint Thomas est en mesure de réconcilier un tel absolu avec la nouveauté de l'histoire grâce à une notion sur-formelle et sur-temporelle de la réalité.

La noción metafísica de ser como creación es necesaria para evitar dos exageraciones: la visión dinámica de causalidad que mina el fondo inteligible del mundo y una visión estática dl universo compuesto de especies eternas y sin posibilidad de dar origen a nuevas formas de vida. Una perspectiva dinámica de la causalidad comporta una des-integración de las cuatro causas y ésta implica la disolución de todo sentido. Por otro lado, para garantizar la inteligibilidad hay que tomar la sustancia como absoluta. El artículo muestra que la explicación de la creación en el tiempo, según Tomás de Aquino es capaz de reconciliar la absolutez de la sustancia con la novedad de la historia, gracias a una noción supra formal y supra temporal de la realidad.

O artigo firma que uma noção metafísica de ser, como criado, é necessária para evitar, de uma parte, uma mera noção dinâmica de causalidade, que mina todo o fundamento de inteligibilidade do mundo e, de outra, uma visão estática do universo composto de espécies eternas e sem possibilidade que brotem novas formas de vida. Uma visão dinâmica da causalidade comporta, antes de tudo, uma *des-integração* das quatro causas

e, assim, tal *des-integração* implica a dissolvência de todo motivo de senso. Em segundo lugar, para garantir a inteligibilidade é necessária a afirmação da absolutez da substancia. Em fim, o artigo demonstra que a explicação da criação *no tempo* segundo São Tomás é em grau de reconciliar tal absolutez com a novidade da história graças a uma noção sobre-formal e sobre-temporal de realidade.

El espíritu de Yahvé y el dinamismo de la creación en el Antiguo Testamento

CARLOS GRANADOS *

1. INTRODUCCIÓN A LA PROBLEMÁTICA

J. Ratzinger afirmaba hace unos años que el retorno a la doctrina de la creación era “uno de los compromisos más urgentes de la teología”¹. Esta urgencia se aplica especialmente al campo de la teología bíblica veterotestamentaria, en el que ha predominado una clara infravaloración del tema. Factor importante en la génesis de esta situación fue la teología del Antiguo Testamento de G. von Rad. El exegeta alemán planteaba allí abiertamente la pregunta: ¿qué lugar ocupa la doctrina de la creación en el Antiguo Testamento? En su respuesta, trataba de demostrar que el concepto de un Dios creador tuvo en Israel un valor secundario, útil solo para reafirmar la fe en el Dios salvador. Para von Rad (y para muchos que tras él han aceptado sus teorías) la creación ocupaba de este modo un puesto marginal en el marco de una teología bíblica desarrollada a partir de los llamados “credos históricos”². Autores más recientes insisten también en

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1. J. RATZINGER, *Creación y pecado*, Eunsa, Pamplona 1992, 16.

2. Aparte de las páginas dedicadas al problema de la creación en su *Theologie des Alten Testaments, I. Die Theologie der geschichtlichen Überlieferungen Israels*, München 1962⁴,

el valor meramente circunstancial de esta doctrina³. W. Brueggemann llega incluso a estigmatizarla, considerándola un instrumento conceptual de las clases dominantes para imponer una visión monárquica (antidemocrática). A su juicio, el concepto de creación debe tenerse, dentro de una teología bíblica consecuente, solo como un punto de vista más y de ninguna manera como fundamento para una reflexión de conjunto⁴.

¿Qué decir de estas opiniones? ¿Es realmente la creación un tema marginal en el Antiguo Testamento? Se ha dado en los últimos años un replanteamiento de la cuestión con una reacción crítica a la tendencia anteriormente descrita. Esta reacción ha llegado en particular desde el llamado “acercamiento canónico”. Una valoración renovada del principio interpretativo de la unidad de la Escritura ha llevado a decir que, incluso aunque en determinadas etapas de la historia religiosa de Israel la doctrina de la creación no haya ocupado un puesto relevante, el texto final testimonia su importante y decisivo valor. Así, R. Rendtorff afirma:

la Biblia hebrea comienza con la creación. Las teologías del Antiguo Testamento normalmente no. ¿Por qué? La respuesta es obvia: por la teología de los autores respectivos de cada una de esas teologías del Antiguo Testamento⁵.

véase su conocido artículo: “Das theologische Problem des alttestamentlichen Schöpfungsglaubens”, en G. VON RAD (ed.), *Gesammelte Studien zum Alten Testament*. I, TB 8, München 1958, 136-147.

3. Ver, p.e., R. MARTIN ACHARD, *Et Dieu crée le ciel et la terre... Trois études: Isaïe 40 – Job 38-42 – Genèse 1*, Essais Bibliques 2, Labor Fides, Geneve 1979, 20, donde afirma que la revelación bíblica no comienza con la creación y que esta doctrina es en realidad accesoria y subordinada a la de la salvación.
4. Brueggemann afirma que «la teología de la creación se convierte normalmente en propaganda imperial y en ideología»; y más tarde defiende que «la función social de la teología de la creación [...] es establecer, legitimar y defender el orden a expensas de la transformación». Véase a este respecto la interesante discusión entre Brueggemann y Middleton en dos artículos: J.R. MIDDLETON, “Is Creation Theology Inherently Conservative?”, en *HTThR* 87 (1994) 257-277 y W. BRUEGEMANN, “Response to J. Richard Middleton”, en *HTThR* 87 (1994) 279-289.
5. R. RENDTORFF, “Some Reflections on Creation as a Topic of Old Testament Theology”, en E. ULRICH - J. WRIGHT - R. P. CARROLL - P. R. DAVIES (edd.), *Priests, Prophets and Scribes. Essays on the Formation and Heritage of Second Temple Judaism in Honour of Joseph Blenkinsopp*, JSOT.S 149, JSOT Press, Sheffield 1992, 204.

Pero con esta crítica no queda resuelto el problema; la importancia de la doctrina de la creación en el Antiguo Testamento no se deriva sin más del simple hecho de que la Biblia comienza así. Sería tanto como decir, p.e., que toda teología del Nuevo Testamento debe tomar como punto de partida y dar una importancia decisiva a los relatos de la infancia por el simple hecho de que el primer evangelio en orden canónico (el de Mateo) comienza así.

La aceptación de un principio canónico de lectura no justifica sin más la importancia del tema de la creación dentro del tejido bíblico. Para mostrar su relevancia es necesario, en primer lugar, partir de un concepto más cabal de lo que significa “creación”. “Crear” es un acto originario que no se agota en el inicio, sino que se realiza y se lleva a cumplimiento a través de un dinamismo finalizado en el evento escatológico (“nueva creación”). Esta concepción más completa permite mostrar la importancia del tema a través de su íntima vinculación con los datos centrales del desarrollo y el cumplimiento ulterior de la historia del pueblo (paso del mar Rojo, construcción de Templo, vuelta del exilio, etc.).

En este marco, la pregunta concreta que queremos plantearnos aquí podría formularse así: *¿Tiene la noción de “espíritu divino” alguna relevancia y utilidad para elaborar una teología bíblica de la creación? Y si la tiene, es decir, si esta noción permite comprender más profundamente la categoría de creación en cuanto dinamismo operante en la historia y cumplido en la escatología, ¿qué datos bíblicos prueban la verdad de esta vinculación? y ¿cómo se hace presente este espíritu en los diversos momentos de este dinamismo creador?*

La noción bíblica de “espíritu de Dios” no evoca en primer término la realidad de Dios como ser inmaterial, sino ante todo su presencia en lo creado y en la historia como fuerza dinámica, alentadora y activa⁶. Esta presencia se manifiesta en tres momentos fundamentales que guiarán nuestra exposición: su *actuación primera* coincide con el inicio del mundo,

6. Véase A. VERGOTE, “*Tu aimeras le Seigneur ton Dieu...*”. *L’identité chrétienne*, Du Cerf, Paris 1997, 102-103: «El Espíritu de Dios es la actividad interna de Dios en las cosas que Él crea y con las que no coincide [...]. En lenguaje moderno se podría comprender a través de una conjugación de dos términos: “trascendencia” creadora y “panenteísmo”. Indicando con este último término la presencia animadora de Dios en (“en”) todo (“pan”) lo que él hace existir y orienta hacia su cumplimiento».

cuando la palabra divina genera el cosmos (**apartado 2**); viene luego su *actividad providente en la historia*, sea a través de una acción recreadora continuada en el mundo (creación continua), sea en las gestas de salvación que constituyen actos fundantes de naturaleza creadora (**apartado 3**); veremos, por último, su actividad en la *nueva creación*, es decir, en el cumplimiento escatológico (**apartado 4**).

Conviene todavía, antes de comenzar con el estudio de los textos, clarificar brevemente una cuestión metodológica. El pueblo de Israel habla de la creación empleando categorías e imágenes de su contexto cultural (egipcio, mesopotámico, etc.) y por ello los estudios sobre la doctrina bíblica de la creación emplean frecuentemente el método genético o comparativo. Sin duda, el conocimiento de mitos y categorías presentes en este material extrabíblico es útil y aleccionador. Hay que decir, sin embargo, que esta referencia no ofrece en absoluto la clave última para una comprensión adecuada del texto bíblico. Israel ha insertado las categorías asumidas de otras culturas en el edificio nuevo de su fe dándoles así un sentido y un valor diverso. La esencia de la religión israelita no tiene su génesis última en elementos ya presentes en culturas circundantes sino en un evento de revelación divina. El método genético corre el riesgo de dejarse fascinar por ciertos datos coincidentes o por un hipotético enmarque cultural que al fin pierde la especificidad (lo que constituye la esencia) del dato bíblico⁷.

En realidad, el mejor modo de llegar a una comprensión auténtica de la doctrina bíblica de la creación es el estudio del mismo contexto literario y religioso en que se ha transmitido, a saber, el canon bíblico. Los datos reunidos por un estudio genético serán naturalmente una herramienta útil en manos de este acercamiento de tipo canónico.

7. Así, p.e., M. GÖRG, “Religionsgeschichtliche Beobachtungen zur Rede vom ‘Geist Gottes’”, ID. (ed.) en *Studien zur biblisch-ägyptischen Religionsgeschichte*, SBA.AT 14, Katholisches Bibelwerk GMBH, Stuttgart 1992, 165-189 ve en el “espíritu de Dios” de *Gn 1,2* la figura del dios Amún, el más alto del panteón egipcio, el dios sin figura, el Viento originario y “dador de vida”. En el texto bíblico, sin embargo, Dios no se identifica en ningún momento con ese viento. Además, esta interpretación desenfoca la función del “viento divino” en la economía del relato genesiaco, donde no ejerce una función vivificante.

2. EN EL PRINCIPIO, EL ESPÍRITU DEL DIOS CREADOR

Pasando ya a nuestro tema específico, debemos comenzar por los dos relatos fundantes del Génesis sobre la creación. Ambos refieren, en momentos clave de su desarrollo, la actuación de un espíritu, viento o aliento divino. Se trata, sin embargo, de referencias escuetas y oscuras, que dejan un sabor a incertidumbre sobre su verdadero alcance.

En el primer relato (llamado “sacerdotal”) tenemos en 1,2 la afirmación de que “el espíritu (o el viento) divino (*rú^aḥ ’ēlōhîm*) aleteaba sobre las aguas”. En el segundo relato (“yahvista”) se nos dice que “Yahvé sopló un hálito de vida (*nišmat ḥayyîm*) en las narices del hombre” (2,7). ¿Qué importancia tienen estas afirmaciones? ¿Cómo pueden ayudarnos a comprender la función del espíritu en la dinámica de la creación?

2.1 Gn 1,2. *El espíritu, teofanía de Dios en su creación*

«Y el espíritu (o el viento) de Dios aleteaba sobre las aguas» (Gn 1,2b). ¿Qué significa este versículo? ¿Qué sentido dar al sintagma *rú^aḥ ’ēlōhîm*? Sintetizando, podríamos reducir a tres las posibles interpretaciones del texto:

a). La primera es traducir “viento impetuoso”. Los partidarios de esta interpretación consideran el nombre *’ēlōhîm* (normalmente “Dios”) como un superlativo y ponen el sintagma *rú^aḥ ’ēlōhîm* en paralelo con los términos anteriores que hacen referencia a la confusión y a la oscuridad reinantes (Gn 1,2a). El viento de Gn 1,2b sería en este caso una simple tromba o huracán que participa del caos anterior a la creación⁸.

b). La segunda opción sería traducir “un viento de Dios”, es decir, ver aquí la presencia de un fenómeno meteorológico (un viento huracanado) que procede de Dios⁹.

8. Es la posición de G. VON RAD, *Das erste Buch Mose. Genesis*, ATD 2/4, Göttingen 1976¹⁰, 37 y de otros autores como P. J. SMITH, “A Semotactical Approach to the Meaning of the Term *rú^aḥ ’ēlōhîm* in *Genesis* 1:2”, en *JNSL* 8 (1980), 99-104; J. J. SCULLION, *Genesis. A Commentary for Students, Teachers, and Preachers*, Old Testament Studies 6, The Liturgical Press, Collegeville 1992, 16.

9. Así, p.e., N. H. RIDDERBOS, “Gen 1.1 und 2”, en B. GEMSER et al. (edd.), *Studies on the Book of Genesis*, OTS 12, Leiden 1958, 214-260.

c). La última sería traducir “el espíritu de Dios”, dando al sintagma un valor netamente teológico. Habría que hablar en este caso del “espíritu creativo de Yahvé”¹⁰.

Nuestra interpretación oscila, como enseguida veremos, entre la segunda y la tercera de las aquí propuestas.

Ya desde un punto de vista puramente gramatical, la opción a). es bastante improbable. El nombre *'ēlōhîm* actúa como superlativo hebreo en casos raros, y nunca unido a *rû^{ah}*; en concreto, las 34 recurrencias restantes de *'ēlōhîm* en *Gn* 1,1-2,3 se traducen sin duda como “Dios” (ver en particular los vv.1.3), ¿por qué se debería admitir que solo en el v.2 estamos ante una excepción? Nos parece, por otro lado, poco plausible que el redactor haya usado un concepto tan denso como *rû^{ah}* *'ēlōhîm* sin pretender decir nada más que “turba impetuosa”¹¹. Con todo, tampoco es pertinente desvincular el sintagma de su contexto inmediato dándole sin más el sentido traslaticio (estrictamente teológico) que puede tener en otros pasajes. Es necesario explicar la función de esta *rû^{ah}* en su contexto particular.

Tratemos de ahondar un poco más en esta dirección. El texto de *Gn* 1,2 evoca la presencia de un viento procedente de Dios que precede al evento creativo. Es como un primer movimiento divino, anterior a la manifestación que va a tener lugar enseguida a través de su palabra. Pro-

10. Así, p.e., B. S. CHILDS, *Myth and Reality in the Old Testament*, SCM, London 1960, 35; también defiende esta postura J. ROBSON, *Word and Spirit in Ezekiel*, Library of Hebrew Bible 447, New York - London 2006, 236. El espíritu sería en este caso “the impending creative activity of the deity”, como afirma M. DE ROCHE, “The *rû^{ah}* *'ēlōhîm* in *Gen* 1:2c: Creation or Chaos”, en L. M. ESLINGER - G. TAYLOR (edd.), *Ascribe to the Lord. Biblical and Other Studies in Memory of Peter C. Craigie*, JSOT.S 67, JSOT Press, Sheffield 1988, 303-318, 318. Según ROBSON, *Word...* cit., 237 y T.E. FRETHEIM, “Word of God”, *Anchor Bible Dictionary* VI, 961-968, 965, existe una conexión entre el “espíritu” al que se refiere *Gn* 1,2 y la “palabra creadora” que se evoca justo a continuación (ver *Sal* 33,6).

11. No se puede en absoluto minimizar la importancia teológica de esta expresión. Sobre todo considerando el tono solemne y la economía de las palabras propia de este relato sacerdotal. El significado superlativo de *'ēlōhîm* resulta en textos como 1S 14,15; *Jon* 3,3; *Sal* 68,16, pero nunca con *rû^{ah}*. Así, A. CAQUOT, “Brèves remarques exégétiques sur *Genèse* 1, 1-2”, en *In principio. Interprétations des premières versets de la Genèse*, Centre d'études des religions du livre, Paris 1973, 9-21, 19 afirma: «sería sorprendente que el nombre *'elōhîm*, resultando varias veces en nuestro relato con el significado claro de “Dios”, recibiera solamente aquí una acepción minimizadora. Es mejor conservar la traducción habitual: el viento de Dios».

bablemente, la imagen tradicional que ha inspirado a nuestro autor en la elección de esta terminología es la de las “alas del viento” (*kanpê rû^{ah}*) sobre las cuales Dios vuela (cf. *Sal* 18,11) y que en el *Sal* 104,3 ejercen una *función teofánica* en un contexto cosmológico particularmente afín al de *Gn* 1 (cf. también *Zac* 5,9 sobre las alas del viento)¹². Dios viene en las alas del viento para revelarse como el Creador. La *rû^{ah}* ’*ēlōhîm* de *Gn* 1,2 estaría inscribiendo el evento creativo dentro de una dinámica de revelación. Encontramos en el capítulo primero del libro de *Ezequiel* un viento (*rû^{ah}*) que realiza una función bastante similar, en el contexto de una teofanía. Según *Ez* 1,4 la revelación del Dios entronizado sobre la creación y con dominio sobre los vivientes (cf. vv.26–28), se abre (como en *Gn* 1,2) con la llegada de un “viento impetuoso” que proviene de Dios para preparar y conducir a su término dicha revelación.

La *rû^{ah}* del texto genesiaco es, por tanto, un mensajero que anuncia la teofanía de Dios en su creación. Se deriva de aquí naturalmente la concepción de un Creador que trasciende y desborda lo creado y, por tanto, la noción de evento creador como acto radicalmente *libre*. El movimiento previo del espíritu divino implica un concepto de creación como acto gobernado por una elección.

Es posible entrever también en esta *rû^{ah}* de *Gn* 1,2 la puesta en marcha de una dinámica cuyo campo de realización será la historia de la salvación y cuya culminación será el evento escatológico. El marco de una lectura unitaria de la Biblia nos permite una interpretación teleológica de los textos, atenta a percibir elementos de desarrollos posteriores que se anticipan en forma de “figura”. En este sentido, hay en la *rû^{ah}* ’*ēlōhîm* de *Gn* 1,2 un sentido salvífico *in nuce*, una presencia dinámica del espíritu divino que empuja todo lo creado hacia su cumbre escatológica¹³.

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12. Estamos ante la imagen del Dios que viene caminando en las alas del viento, abriéndose camino en medio del caos (cf. *Sal* 77,20; cf. *Job* 9,8; *Am* 4,13; *Hab* 3,15). En *Job* 22,14 son las nubes las que anuncian el paso de Yahvé y en *Zac* 6,5 se trata de cuatro carros que son cuatro vientos y que se presentan como mensajeros de Yahvé (v.7).
 13. Notemos que la inspiración inmediata de *Gn* 1,2 se debe buscar en una época (exílica o postexílica) en que la noción de “espíritu de Yahvé” ha adquirido ya toda su carga de “fuerza santificante” (cf. *Ez* 36–37) y “potencia divina que guía al pueblo” (cf. *Is* 63,14). De este modo, lo que el autor sacerdotal ya sabía del espíritu divino (que se había posado sobre un pueblo santo tras haber triunfado de los enemigos) se puede ver implícitamente anticipado en el comienzo, antes de la primera palabra creadora.

Podemos así completar nuestra interpretación de Gn 1,2 a la luz de otros textos como Gn 8,1; Ex 14,21; 15,8.10 en los que el viento que procede de Dios actúa sobre las aguas caóticas manifestando la acción salvífica de Dios en la historia (nótese también la oposición al “suelo seco” en Gn 1,9 y en Ex 14,22; 15,19). *El Dios que se revela en su viento para crear se manifestará en ese mismo viento para salvar*. La doctrina sobre la libertad de Dios en la creación nos dirige a la de la libertad divina en la elección y en la salvación.

2.2 Gn 2,7. El aliento de vida en el hombre

“Yahvé Dios formó al hombre con polvo de la tierra y puso en su nariz un hálito de vida (*nišmat ḥayyim*)”. El texto yahvista de la creación describe otra de las funciones típicas del espíritu divino en el marco de la creación: “vivificar” (cf. sobre todo Ez 37,1-14 y Sal 104,28-29). El término hebreo *nēšāmāh* (“hálito”) comparte con el término *rūāḥ* (“espíritu”) el significado de “fuerza vivificante creadora de Dios”¹⁴.

El problema que surge es cómo interpretar este gesto divino. Según Westermann, en Gn 2,7 se trataría simplemente de la constitución del hombre como ser vivo, nada más. Gunkel, sin embargo, otorga a este motivo literario un profundo valor antropológico: *el hombre está vinculado con Dios, pues su aliento es un reflejo del divino*¹⁵. A nuestro parecer, la afirmación de Gunkel capta mucho mejor el sentido de esta donación del aliento vital dentro de la economía del relato de Gn 2. En efecto, siendo verdad que otros textos usan expresiones parecidas para referirse al hálito vital de los animales (cf., p.e., Gn 7,22: *nišmat rūāḥ ḥayyim*), en el relato de Gn 2 el gesto del v.7 establece una diferencia entre la creación del hombre (al que

14. Cf. Job 33,4: “el espíritu de Dios (*rūāḥ ʾēl*) me hizo; el aliento del todopoderoso (*nišmat šadday*) me vivificó”; y ver E. HAAG, *Der Mensch am Anfang. Die alttestamentliche Paradiesvorstellung nach Gn 2-3*, Trierer Theologische Studien 24, Paulinus, Trier 1970, 21.

15. C. WESTERMANN, *Genesis 1-11*, BKAT I/1, Neukirchen-Vluyn 1974, 282: «Der Lebensatem also bedeutet einfach die Lebendigkeit, das Einhauchen des Lebensatems die Belebung des Menschen, nichts weiter (wie z.B. Ps 104,28ff.; auch Gn 7,22)»; el propio Westermann critica en p.281 la posición de Gunkel, para quien este aliento significaba “ein tiefer Gedanke: der Mensch ist Gott verwandt, sein Odem eine Austrahlung des göttlichen”.

Dios comunica directamente su aliento vital) y la de los animales (que Dios simplemente forma: v.18). En la presentación yahvista, esta particularidad de la creación del hombre implica una relación única con Yahvé que le sitúa sobre las bestias (a las que da nombre)¹⁶. Diversos autores, de hecho, han puesto en estrecha relación el motivo de la *imago Dei* en Gn 1,26-28 con este otro del “hálito divino en la nariz del hombre”, que resulta en Gn 2,7. Se trata de una observación interesante que confirma el profundo valor antropológico de la simbología empleada por el autor yahvista¹⁷.

Vimos cómo en Gn 1,2 el espíritu o el viento divino representaba esa fuerza reveladora que da inicio a la libre teofanía de Dios en su creación. Dios se manifiesta en alas del viento para comenzar su obra. Pues bien, el hombre, imagen de Dios (Gn 1,26-28), es dentro de la creación el lugar particular donde se revela lo divino. *El viento teofánico que anuncia la revelación de Dios en lo creado (Gn 1,2) anuncia también, de otro modo, la revelación más específica de Dios en el hombre (Gn 2,7)*. El ser humano es portador de una autoridad que le convierte en teofanía de lo divino entre los seres vivos.

16. Ver S. CROATTO, *Crear y amar en libertad. Estudio de Génesis 2: 4 – 3: 24*, La aurora, Buenos Aires 1986, 42; y también T. C. MITCHEL, “The Old Testament Usage of the *nšama*”, en *VT* 11 (1961) 177-187.

17. S. PAAS, *Creation and Judgement. Creation Texts in Some Eighth Century Prophets*, OTS 47, Leiden - Boston 2003, 35 sostiene que el autor sacerdotal conocía el relato yahvista y lo ha empleado como trasfondo conceptual en Gn 1,26-27. La idea estaba ya presente en J. C. DE MOOR, “The Duality in God and Man: Gen 1:26-27 as P’s Interpretation of the Yahwistic Creation Account”, en J. C. DE MOOR (ed.), *Intertextuality in Ugarit and Israel. Papers read at the tenth joint meeting of The Society for Old Testament Study*, OTS 40, Leiden - Boston - Köln 1998, 112-125. Por su parte, CROATTO, *Crear...* cit., 48 afirma: «En Gn 2:7 el aliento de Dios es comunicado a todo hombre, como en 1:26s el ser “imagen de Dios” – título propio de los reyes de Mesopotamia y Egipto – es otorgado a todo ser humano [...] Estos dos relatos (Gn 1:26s y 2:7) se tocan y retransmiten sentido». Según P. HUMBERT, *Études sur le récit du paradis et de la chute dans la Genèse*, Neuchatel 1940, 169 el relato sacerdotal de Gn 1 constituiría una especie de correctivo al yahvista, restringiendo la crasa afirmación de Gn 2,7 para proteger el monoteísmo y la soberanía divina. Este matiz polémico no resulta del todo convincente. Más bien vemos una complementariedad expresada de modos diversos a través de la “donación del aliento divino” y del concepto de imagen.

2.3 Gn 6,3. El espíritu de vida tras el drama del pecado

Gn 6,1-4 es un pasaje un tanto oscuro y complejo sobre el que nos interesa resaltar solamente un aspecto significativo para nuestro tema. El texto explica cómo, cuando los hombres comenzaron a multiplicarse sobre la tierra, los “hijos de Dios” (*b^enê hā’ēlōhîm*) vieron que las “hijas de los hombres” (*b^enôt hāādām*) eran hermosas y las tomaron por mujeres; en respuesta a esta acción el texto trae unas palabras de Yahvé que suenan a castigo: «no permanecerá mi espíritu (*rūhî*) en el hombre, porque él es carne; serán sus días ciento veinte años» (v.3).

El pasaje es, como decíamos, confuso. Parece claro que esta limitación del espíritu divino en el hombre es una punición, pero no queda del todo explicado el motivo de dicho castigo¹⁸. Probablemente la clave interpretativa está en el contraste establecido entre los “hijos de Dios” y las “hijas de los hombres”, es decir, en el hecho de que esta unión de unos “hijos” con otros ha producido la confusión de lo divino con lo humano. En el fondo, el pecado que Dios castiga aquí es muy similar al que castigaba en Gn 3. Allí una mujer (seducida por la serpiente) se alzaba con su pretensión de poseer la propiedad divina y Dios, como respuesta, expulsando a la mujer y a su marido del paraíso, les castigaba a “no vivir ya para siempre” (Gn 3,22). En Gn 6,3 el pecado es también la pretensión de confundir lo divino con lo humano (esta vez las seducidas son las “hijas del hombre”) y Yahvé no hace sino confirmar el castigo de Gn 3,22: el hombre no vivirá ya para siempre, sino que “sus años serán ciento veinte”.

Nos interesa en particular ilustrar el modo en que este castigo de Gn 6,3 pone en juego la temática del *espíritu de Dios*. El drama del pecado introduce una economía diversa en la donación del *pneuma* divino. Se trata de una especie de traba o barrera temporal que va a truncar su dinámica vivificante, porque el hombre no ha sido capaz de madurar en obediencia a Dios. Esos “ciento veinte años” son un signo ambiguo que implica, por

18. Entre los enigmas de este pasaje está la identificación de los “hijos de Dios” ¿Quiénes son? Hay quien dice que se trata de seres divinos, pero no falta también quien afirma que son monarcas (héroes y reyes antiguos) o simplemente la descendencia de Set (en oposición a la de Caín); ver, p.e., W. A. VAN GEMEREN, “The Sons of God in *Genesis* 6:1-4: An Example of Evangelical Demythologization?”, en *WTJ* 43 (1981) 320-348 y más recientemente K.A. MATHEWS, *Genesis 1-11:26*, NAC 1A, Broadman & Colman, Nashville 1996, 323-332.

un lado, una mitigación de la pena de muerte (cf. *Gn* 2,17), pero que a la vez simboliza el tiempo de una vida truncada, que no llega a su plenitud; son los años que vive Moisés sin llegar a entrar en la tierra prometida, viéndola solo de lejos (cf. *Dt* 31,2; 34,7). Tras el pecado, el espíritu divino no podrá alcanzar ya su plena estatura en el hombre, porque este no ha sido capaz de asimilar en obediencia el plan de Dios, aceptando los tiempos requeridos para que se desarrollara en él la semejanza divina.

3. EL ESPÍRITU CREADOR EN LA HISTORIA

La segunda etapa de nuestro recorrido la ocupan textos que hablan del espíritu divino como agente dinámico y operante en la historia. Nos detendremos en ilustrar: (3.1) su actuación recreadora como espíritu vivificador (en la “creación continua”); (3.2) su actividad en las gestas históricas que significan la creación de Israel como pueblo; (3.3) la regeneración que este mismo espíritu creador obra en lo más íntimo del hombre pecador.

3.1 *El Espíritu creador que renueva el cosmos (Sal 104)*

El Sal 104 pasa revista a la obra de Dios en el cosmos, elemento por elemento, siguiendo un orden muy similar al de *Gn* 1,1 – 2,4: la luz ocupa una posición privilegiada (v.2); el viento interviene un poco más tarde (vv.3-4); la obra del tercer día genesiaco viene en los vv.5-8 acompañada enseguida por la referencia a los vegetales (prados, cedros, viñas: vv.12-18); luego, en los vv.19-20, mediante una mención de la luna y el sol con sus fases, se retoma la obra del cuarto día; los pájaros del quinto día también aparecen (v.12); y la sexta jornada se evoca, en fin, mencionando el alimento que Dios da a todas sus criaturas (vv.27-28; cf. *Gn* 1,29-31).

Y sin embargo, dentro de este aparente paralelismo, el Sal 104 introduce una novedad radical: aquí la creación *se describe*, no se relata. El Sal 104 no añade los días de cada obra, porque todo está presente para él, todo es obra del Dios que crea aquí y ahora, del Dios providente.

En este marco, la función particular del espíritu creador es la animación de los vivientes (v.30: «les envías tu espíritu [sust.: *rú^ah*] y son creados

[raíz: *br'*]). En los seres vivos se revela de un modo particular la necesidad de una continua actividad del creador. Por ello, el Salmo se ocupa muy especialmente de ellos, presentándolos no solo a partir del quinto día, como en *Gn* 1, sino ya desde el principio: el agua existe para abreviar a las bestias (v.11), los árboles para ser poblados de pájaros, y las fases solares para separar el tiempo correspondiente a las bestias y al hombre (vv.22-23). De hecho, la única vez que aparece el término “crear” en el Salmo es precisamente para referirse a la creación de los seres vivos (v.30). *La creación continua se realiza, de un modo muy particular, mediante la obra del espíritu de Dios que mantiene sobre la tierra la novedad de la vida.*

Podemos todavía profundizar esta perspectiva. Es cierto que el salmista se refiere indistintamente en los vv.28-30 a todos los seres que renuevan su vida gracias a la obra del espíritu divino. Pero es cierto también que, en la visión del Salmo, solo corresponde al hombre cantar y gozarse con su Dios mientras vive (cf. v.33). La vida que el espíritu insufla en el ser humano es de una cualidad diversa. ¿Por qué? Porque solo él es, entre todos los vivientes, la imagen de Dios; solo él canta la alabanza divina. Esta propiedad particular se podría llamar “sabiduría”, es decir, capacidad para reconocer y alabar al Dios operante en la creación. Y el espíritu es precisamente quien confiere este don sapiencial (cf. *Job* 32,8.18; 26,4; *Sir* 39,6; *Sab* 7,7; 9,17).

3.2 *El Espíritu creador que salva (Ex 14-15)*

Campo de acción propio del *pneuma* divino es también la historia de Israel, donde se le atribuyen gestas y portentos.

Un momento particularmente significativo es el “paso del Mar Rojo”, evento que señala la creación o nacimiento de Israel como pueblo. El viento impetuoso mandado por Yahvé abre aquí el camino del mar para Israel (cf. *Ex* 14,21). En el himno de *Ex* 15 que sigue a este episodio se identifica esta *rú^{ah}* con el aliento o el viento de Yahvé: «al soplo (sust.: *rú^{ah}*) de tu nariz se acumularon las aguas» (v.8); «soplaste con tu aliento (sust.: *rú^{ah}*) y los cubrió el mar» (v.10). Para comprender en toda su profundidad la obra de este viento divino (que divide las aguas para salvar al pueblo) es necesario iluminarla desde el gesto originario de *Gn* 1,6-8

donde Dios divide las aguas justo después de enviar su viento (v.2)¹⁹. El espíritu de Dios realiza en la historia (en la liberación del pueblo sometido al yugo egipcio) un acto que manifiesta la presencia de esa misma potencia creadora. El nacimiento de Israel es así una re-actualización del evento creador y este último evento encuentra un cumplimiento (parcial) en la actividad del espíritu liberador²⁰. Notemos además cómo esta acción creadora del *pneuma*, que consiste en la “elección del pueblo”, se prolonga después en otros “actos particulares de elección” por los que el espíritu hace a alguien juez (cf. *Jc* 3,10; 6,34; 11,29; 13,25; 14,6.19; 15,14), rey (cf. 1S 11,6; 16,18) o profeta en medio de su pueblo²¹.

Conviene todavía (para completar el contenido de este apartado) añadir una breve anotación explicativa sobre el vínculo que el Antiguo Testamento establece entre la doctrina de la “creación” y la de la “salvación”. Habría que situar esta correlación en una doble vertiente:

a). Por un lado, la experiencia histórica de salvación precede en Israel a la reflexión sobre el Dios Creador, pues el Antiguo Testamento habla de la creación a partir de una experiencia histórica de elección y alianza, es decir, de un conocimiento del Dios revelado en la historia (por ello los textos se interesan en la creación como revelación originaria de Dios y no se ocupan en elucubraciones sobre lo que sucedió antes de la creación)²².

b). Por otro lado, la doctrina de la creación ha obligado a Israel a situar su experiencia histórica en un marco más universal y en todo caso fundante con respecto al marco particular de la elección y la alianza. De este modo, la creación no es un mero corolario secundario de la teología de

19. La crítica reconoce la mano de una misma escuela en ambos textos; cf. por ejemplo M. NOTH, *Das 2. Buch Mose. Exodus*, ATD 5, Göttingen - Zürich 1988⁸, 82-83 que asigna el texto al mismo autor sacerdotal de *Gen* 1.

20. Cf. P. BEAUCHAMP, *L'un et l'autre Testament II. Accomplir les Écritures*, Paris 1990, 223-224.

21. El profeta es el “hombre del espíritu” (cf. *Os* 9,7) y por ello se convierte en “boca de Yahvé” (cf. *Jer* 15,19); es el heraldo que transmite su palabra (cf. *Is* 48,16; 61,1), aquel que está lleno de fuerza gracias al espíritu de Yahvé (cf. *Mi* 3,8) y por medio del cual dicho espíritu continúa activo en la historia (cf. *Zac* 7,12; *Neh* 9,30).

22. El exilio fue probablemente el momento histórico en que Israel desarrolló una reflexión específicamente teológica sobre el tema de la creación. En este marco, dicha reflexión supuso una comprensión más profunda de su fe en el Dios salvador por lo que se refiere a su poder universal y a su unicidad (véase E. ZENGER, “Schöpfung. II. Biblisch-theologisch”, *LThK* IX, 217-220, 219).

la historia (como un argumento a fortiori para mostrar la potencia del Dios de la alianza), sino más bien la culminación y el punto de llegada de dicha teología²³.

3.3 *El Espíritu creador que santifica (Sal 51)*

Tocamos en este apartado la obra más profundamente creadora del *pneuma* divino. Su actividad vivificante en el cosmos y su acción liberadora son figura de una vida y una liberación más profunda, que afectan a la muerte y esclavitud interior del hombre. El espíritu de Dios se presenta en la historia del pueblo como esa fuerza exigente e incoercible que no admite componendas con el mal y barre la impureza (cf. *Os* 13,15; *Is* 27,8; *Ez* 13,11.13). Este espíritu es como una lejía que abrasa y limpia la sangre impura (cf. *Is* 4,4). Es el “espíritu santo”, que Dios puso en medio del pueblo (cf. *Is* 63,10-11) y que no puede resistir contaminación alguna. El *Sal* 51 ilustra de un modo enormemente profundo la correlación entre esta característica de *santidad propia del espíritu divino* y su *acción recreativa en el interior del hombre*.

El *Sal* 51 pone en boca del David pecador una súplica de perdón y renovación interior. Los vv.12-13 llaman particularmente nuestra atención («Oh, Dios, crea [raíz: *br'*] en mí un corazón puro, renueva en mi interior un espíritu firme [sust.: *rú^ah*]; no me arrojes de tu presencia, no retires de mí tu santo espíritu [sust.: *rú^ah*]»). Ese “no retires de mí” implica que el creyente posee el espíritu divino pero puede perderlo; que es don de Dios y le puede ser arrebatado. El adjetivo “santo” indica que lo que puede perder no es la vida en general, sino una muy concreta, la vida en el pueblo “santo”, elegido por Dios. El creyente desea conservar ese

23. Hoy se conoce mejor todo el trasfondo político que motivó a G. von Rad a proponer su tesis sobre la posición secundaria de la doctrina de la creación. Autores más recientes, como T. Fretheim, han reaccionado contra dicha tesis afirmando, p.e., que “el libro de Éxodo está conformado de un modo decisivo por una teología de la creación” (cf. E. FRETHEIM, *Exodus*, Louisville, KY 1991, 13). En el libro de Éxodo, efectivamente, la salvación de Israel y el don de la *Torá* se ven como un cumplimiento (parcial) del proyecto creador, pues todo se culmina con la construcción del Santuario en siete días (imagen del santuario cósmico) y resulta ser en *Ex* 19,4-6 una obra de alcance universal.

espíritu que (de un modo más radical que el aliento divino de Gn 2,7) le hace vivir en la esfera divina o “santa”²⁴. Si el pecado puede producir la muerte en cuanto pérdida de la santidad (ver nuestro apartado 2.3), el salmista sabe que el espíritu divino puede “recrear” en él la pureza y la vida interior (el corazón puro).

El hombre no puede con sus fuerzas alzarse del reino del pecado; tiene que ser acción del espíritu vivificante. El orante del Sal 51 pide por ello que se realice en él una especie de nueva creación y menciona tres veces el término espíritu (*rú^ah*): en el v.12, se refiere a su espíritu (su voluntad) que pide ser renovado (par.: recreado); en el v.13 menciona el *pneuma* divino, suplicando que permanezca en él esta fuente de vida y santidad; en el v.14 parece referirse también (aunque no es seguro) al aliento divino, llamándolo “generoso” (*rú^ah n^e dībāh*): “afiánzame con [tu] espíritu generoso”. En todo caso, el espíritu que procede de Dios tiene como característica la santidad y es el agente de un proceso de recreación (perdón divino) que regenera el dinamismo del actuar humano (su espíritu) y engendra una nueva criatura.

4. EL ESPÍRITU, TEOFANÍA ESCATOLÓGICA DEL DIOS QUE RECREA

La acción creadora del espíritu divino, que se manifiesta también a través de su actividad providente en el mundo, en la historia y en la renovación del hombre pecador, alcanzará un punto culminante al final de los tiempos. Esto anuncian de un modo particular los profetas. En diversos textos proféticos (especialmente en *Isaías* y *Ezequiel*) se promete un don escatológico vinculado con la acción del *pneuma* divino (cf. *Is* 32,15; 34,16; 44,3; 59,21; *Ez* 36,27; 37,14; 39,29; *Jl* 3,1-2)²⁵.

Algunos textos vinculan esta acción escatológica del espíritu con una renovación paradisiaca de la tierra, que representa una “nueva creación”. Un ejemplo es *Is* 32,15-20, que comienza así: «Hasta que se derrame so-

24. Cf. L. ALONSO SCHÖKEL, *Treinta Salmos. Poesía y oración*, Madrid 1981, 217-218.

25. La imagen del “agua” evoca también, en textos del segundo *Isaías* como 44,18; 55,1, el derramamiento escatológico del espíritu divino. La promesa de este *pneuma* de Yahvé se concentra otras veces sobre un particular como el rey (*Is* 11,2), el profeta (*Is* 61,1) o el siervo (*Is* 42,1).

bre nosotros el espíritu (sust.: *rú^ah*) de lo alto; entonces el desierto se hará vergel»²⁶. La creación renovada, convertida en casa de la justicia, la paz y la equidad (cf. v.16), revela la presencia del Dios recreador y salvador. Isaías muestra así en qué consiste y cómo se realiza el cumplimiento del impulso originario del creador. Consiste en el don de la paz; y se lleva a cabo mediante una nueva efusión de espíritu que reposa directamente sobre el hombre (“sobre nosotros”). Este hombre rebosante de espíritu canta la alabanza de lo creado llevando a plenitud el dinamismo creador.

Otros textos, vinculan directamente la acción escatológica del *pneuma divino* con la “recreación de Israel”. Esta perspectiva se desarrolla, p.e., en *Ez* 37,1-14. En esta visión del profeta, el espíritu (espíritu divino según el v.14) obra el milagro de la vivificación del pueblo muerto. Esta vivificación se da en *dos etapas*. En una primera, crecen tendones, carne y piel (vv.4-8); en una segunda, viene el espíritu para dar vida (vv.9-10). Hay un consenso bastante generalizado en vincular estas *dos etapas* con los dos momentos que estructuran la formación del hombre en *Gn* 2,7, a saber: “modelación con barro” (v.7a), en primer lugar; “vivificación obra-da por el aliento divino” en segundo (v.7b)²⁷. El evento escatológico de *Ez* 37 culmina una dinámica vivificante puesta en marcha en el origen; el espíritu viene de nuevo para llevar a perfección su obra. Si en *Gn* 2,7 esa vida (don del aliento divino) se desarrollaba en el marco de un cono-

26. Según W. MA, *Until the Spirit Comes. The Spirit of God in the Book of Isaiah*, JSOT.S 271, JSOT Press, Sheffield 1999, 210 en *Is* 32,15 el derramamiento del espíritu divino sobre el pueblo produce como efecto inmediato una “nueva creación” que se manifiesta en el rebrotar de la vida natural y la fecundidad de montes y colinas. Algo similar se percibe en *Is* 11,1-10: al derramarse el espíritu sobre el Ungido se renueva la tierra y se anuncia el retorno a un estado paradisiaco (cf. también *Ez* 36,33-38 tras la referencia a un renovado don del espíritu en los vv. 26-27).

27. Nótese sobre todo la relación de *Gn* 2,7: «sopló en (*nph b'*) sus narices aliento de vida (*nišmat hayyim*), y fue el hombre un ser viviente (*nepeš hayyāl*)», con *Ez* 37,9: «ven espíritu, sopla en (*nph b'*) estos muertos y vivirán [raíz: *hyh*]». Evocando claramente *Gn* 2,7 el texto griego lee en *Ez* 37,5 πνεῦμα ζωνης; sobre el paralelismo, cf. W. ZIMMERMANN, *Ezekiel II. 25-48*, BK 13/1-2, Neukirchen-Vluyn 1969, 895; M. NOBILE, “*Ez* 37,1-14 come costitutivo di uno schema culturale”, en *Biblica* 65 (1984) 476-489, 488-489; ROBSON, *Word...* cit., 225. Interesantes también las aclaraciones al respecto de M.V. FOX, “The Rhetoric of Ezekiel’s Vision of the Valley of the Bones”, en *HUCA* 51 (1980) 1-15, 10; L.C. ALLEN, “Structure, Tradition and Redaction in Ezekiel’s Death Valley Vision”, en P. R. DAVIES - D. J. A. CLINES (edd.), *Among the Prophets. Language, Image and Structure in the Prophetic Writings*, JSOT.S 144, JSOT Press, Sheffield 1993, 127-143, 137.

cimiento no accesible (cf. v.17: «del árbol de conocer el bien y el mal no comerás»), en *Ez* 37,6 se desenvuelve en el ámbito de un conocimiento pleno y verdadero (v.6: «pondré espíritu en vosotros, viviréis y conoceréis que yo soy Yahvé»; y cf. también v.14).

El texto de *Ez* 37,1-14 tiene todavía otro interés particular para nuestra investigación. En *Ez* 37,7 se apunta que el espíritu divino entra en la carne de Israel llegando “de los cuatro extremos de la tierra”. Un comentarista de *Ezequiel*, L.C. Allen, señala que «esta concepción parece depender del relato sacerdotal de la creación, en el que la *ru‘ah* de Dios aletea sobre los elementos caóticos del mundo, esperando transformarlos en un cosmos viviente (*Gn* 1,2)»²⁸. El viento impetuoso de *Gn* 1,2 disponía la revelación de Dios en lo creado; el viento impetuoso que *Ezequiel* ve entrar en los huesos secos realiza el sentido de dicha teofanía resucitando al pueblo muerto. El hombre vivo, con esa vida que es conocimiento de Dios (*Ez* 37,6), es en la escatología profética el lugar elegido para realizar la teofanía de Dios en su creación.

Es importante señalar que esta “vida” y este “conocimiento”, que son don del espíritu divino y que realizan el sentido último de la creación, se dan (dentro de una historia marcada por el pecado; cf. nuestros apartados 2.3 y 3.3) a través del acto divino del perdón. Esta perspectiva se expresa de un modo más claro en el oráculo precedente de *Ezequiel*, en 36,16-38, donde la purificación del pecado (v.25: «derramaré sobre vosotros aguas puras y os purificaré») se vincula con el don renovado del espíritu (v.27: «pondré mi espíritu en vosotros»). Aquella obra del espíritu creador que imploraba el orante del *Sal* 51 se ve cumplida en el evento escatológico que *Ez* 36,16-38 anuncia²⁹.

28. Id., *Ezekiel 20-48*, WBC 29, Dallas 1990, 185. Por su parte, BEAUCHAMP, *Création et séparation. Étude exégétique du chapitre premier de la Genèse*, Lyon 1969, 170 ve una *certaine parenté de niveau* entre *Ez* 37,1-14 y la presencia de la *ru‘ah* en *Gn* 1,2.

29. Tanto R. PRESS, “Die eschatologische Ausrichtung des 51 Psalms”, en *Theologische Zeitschrift* 11 (1955) 241-249 como L. NEVE, “Realized Eschatology in Psalm 51”, en *Expository Times* 80 (1969) 264-266, hablan de una escatología realizada en el *Sal* 51: el salmista consideraría como ya realizado en su propia vida lo que *Ez* 36,25-27 anuncia para el futuro. Se podría también sugerir que el texto de *Ezequiel* es posterior al del *Salmo* y que, por tanto, el profeta (en un momento posterior) ha impuesto un movimiento hacia el futuro al texto litúrgico.

Añadamos, por último, que esta esperanza del don de un espíritu re-vivificador y re-creador (inscrita en los textos de *Ez* 36-37) tiene su prolongación en la doctrina sobre la vida después de la muerte, desarrollada por la Biblia en íntima relación con la confesión del Dios creador. Así, la madre de los siete hijos mártires dice en *2 M* 7,23: «el creador del mundo, que ha hecho al hombre en el origen y que preside el origen de todas las cosas, tendrá misericordia y os devolverá el soplo de vida». Este “soplo de vida” presente en el origen (*Gn* 2,7) y anunciado como don escatológico (*Ez* 37,1-14) se promete también al fiel difunto que muere confesando su esperanza en el Dios de Israel.

5. CONCLUSIÓN

A modo de conclusión es posible sintetizar la obra del espíritu divino dentro del dinamismo creador enumerando cuatro funciones interrelacionadas que han resultado especialmente centrales en los textos estudiados.

a). El espíritu es en primer lugar *el mensajero que revela la presencia de Dios* en su creación (*Gn* 1). Esta revelación busca una respuesta de reconocimiento por parte del hombre, el único ser dentro de la creación capaz de darla. El texto de *Ez* 37 anuncia precisamente cómo producirá el espíritu dicha respuesta (vv.6.14: «conoceréis que yo soy Yahvé»). En el texto de *Is* 32,15-20 se expresa algo similar pero en términos de “justicia”: la creación manifestará plenamente la presencia de Dios cuando esté llena de esa justicia que el *pneuma* engendra en el ser humano.

b). El espíritu es *el que anima y vivifica*, sosteniendo la obra de la creación gracias a su continua actividad (cf. *Sal* 104,30). Ya vimos cómo la misión reveladora de la *rúah* divina, evocada en *Gn* 1,2, se concretaba en *Gn* 2,7, precisamente en la vivificación del ser humano. El hombre, vivificado por el don del espíritu, es el que lleva a término la obra de la creación cantando la gloria divina (cf. *Sal* 104,33).

c). El espíritu es también *fuera salvífica que actúa en esa historia particular* (la de Israel) *en la que se va actualizando y cumpliendo el proyecto originario de la creación*. El viento que opera dividiendo las aguas para liberar al pueblo santo en *Ex* 14-15 es el mismo que dividía las aguas en *Gn* 1. De este

modo, la libertad del acto creador y la elección del acto salvador brotan de un mismo Dios que actúa por su espíritu.

d). El espíritu es por último la *potencia santificadora que transforma y recrea el interior del hombre*. Sus actividades vivificante y liberadora, apenas evocadas, son figura de una actuación más profunda demostrada en el acto del perdón (ver *Sal 51*). En una historia marcada por el pecado, el plan divino sobre lo creado se lleva a término mediante una recreación interior del hombre que es obra del espíritu y que produce frutos de justicia, conocimiento y santidad.

SOMMARI

La necessità di ripensare la dottrina della creazione riguarda in modo particolare la teologia biblica veterotestamentaria, che ha rischiato di considerarla un tema marginale. In particolare, viene indagato il ruolo dello Spirito Santo al fine di elaborare una teologia biblica della creazione. L'analisi dei testi genesiaci mette in luce come l'azione dello Spirito Santo annunci la rivelazione di Dio nel creato e in modo specifico nell'uomo. Lo studio di ulteriori testi scritturistici prende in considerazione l'opera dello Spirito nella storia e in rapporto al peccato. Il ruolo dello Spirito Santo consiste nell'essere messaggero di Dio, vivificatore di tutto ciò che esiste, attualizzatore del progetto originario della creazione nella storia di Israele, santificatore della vita dell'uomo.

The necessity of rethinking the doctrine of creation regards in a particular way the Old Testament biblical theology, which has risked considering it a marginal theme. In particular, the role of the Holy Spirit is investigated to the end of elaborating a biblical theology of creation. The analysis of the texts of Genesis puts into light the action of the Holy Spirit announcing the revelation of God in the created in the specific mode in man. The study of further scriptural texts takes into consideration the work of the Spirit in history and in relation with sin. The role of the Holy Spirit consists in the messenger being of God, the life giver of everything of which exists, the actualization of the original project of creation in history of Israel, the sanctifier of life of man.

La nécessité de repenser la doctrine de la création se réfère particulièrement au mode de la théologie vétérotestamentaire qui à risquer de la considérer comme un thème marginal. Afin d'élaborer une théologie biblique de la création, le rôle de l'Esprit Saint est particulièrement mis en relief. L'analyse des textes de la Genèse met en lumière comment l'action de l'Esprit Saint annonça la révélation de Dieu dans le créé et spécifiquement en l'homme. L'étude de textes scripturaires ultérieurs prend en considération l'œuvre de l'Esprit dans l'histoire et dans le rapporta au péché. Le rôle de l'Esprit Saint consiste à être messager de Dieu, vivificateur de tout ce qui existe, actualisateur du projet originnaire de la création dans l'histoire d'Israël, sanctificateur de la vie de l'homme.

La necesidad de repensar la doctrina de la creación toca especialmente a la teología bíblica veterotestamentaria, que ha estado a punto de considerarla como un tema secundario. Especialmente hay que estudiar el papel del Espíritu Santo con el fin de elaborar una teología bíblica de la creación. El análisis de los textos del Génesis pone de manifiesto la acción del Espíritu Santo al anunciar la revelación de Dios en lo creado, en especial del hombre. El estudio de ulteriores textos de la Escritura considera la obra del Espíritu en la historia y en su relación al pecado. El papel del Espíritu Santo consiste en ser mensajero de Dios, vivificador de todo cuanto existe, actualizador del proyecto originario de la creación en la historia de Israel y santificador de la vida del hombre.

A necessidade de repensar a doutrina da criação concerne em modo particular à teologia bíblica veterotestamentária, que arriscou de considerar-la um tema marginal. Em particular, vem indagado o papel do Espírito Santo com a finalidade de elaborar uma teologia bíblica da criação. A análise dos textos genésíacos evidencia como a ação do Espírito Santo anuncie a revelação de Deus no criado e, de modo específico, no homem. O estudo dos ulteriores textos escriturísticos prende em consideração a obra do Espírito Santo na história e em relação ao pecado. O papel do Espírito Santo consiste no ser mensageiro de Deus, vivificador de tudo aquilo que existe, atualizador do projeto originário da criação na história de Israel, santificador da vida do homem.

Saving the Appearances: Creation's Gift to the Sciences

MICHAEL HANBY *

When Nietzsche's famous madman burst into the marketplace in search of God, he was met first with derision and laughter and then with dumb-struck silence. The scene conveys the sense that the death of God, which unchains the earth from its sun and obliterates any reference by which to distinguish up from down or forward from backward, happens almost by accident, less a result of malice and intention than incomprehension and irrelevance. Such is the situation that confronts any attempt to make intelligible the church's understanding of the world as creation. While it may indeed be true that "we can win the future only if we do not lose creation," and that "by living as if God did not exist, man not only loses the mystery of God, but also the mystery of the world and the mystery of his own being", the real problem with any attempt to live otherwise is not overcoming the modern "case against God"¹. Rather it is overcoming the fact that the modern mind has so defined the world that we can no longer imagine, apart from a few nettlesome rules, what difference God's existence or non-existence might make to it.

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1. J. RATZINGER, "In the Beginning..." *A Catholic Understanding of the Story of Creation and the Fall*, Eerdmans, Grand Rapids 1995, 100.

There are manifold reasons for this, not the least of which I shall call, for the sake of brevity, “the Darwinization of everything”, whereby Darwinian biology, a theory with an omnivorous and voracious appetite, is elevated to the position of first philosophy and made into a “theory of everything” explaining, or explaining away, the biological and cultural realms. This is a deeply worrisome phenomenon, as I take Daniel Dennett to be correct in his gleeful assessment that Darwinism is a “universal acid” that dissolves everything it touches². Hence in suggesting how “creation” might once again figure into our understanding of the natural world *qua* natural and *qua* world, I would like to offer a rather impressionistic sketch, first of the relation between theology and the sciences generally, and then secondly, about the relationship between theology and evolutionary biology in particular³. I harbor no illusions about doing justice to all the complex problems here, so I will simply state my theses with a little commentary in the hope that some of these complications will begin to sort themselves out.

First, the question of science’s relation to theology is not *fundamentally* an empirical, historical, sociological or even philosophical question, though of course it is also all of these. Rather it is a *theological* question, logically consequent upon the question of the relation between God and the world. This is because any attempt to answer it will invariably presuppose, project, and enforce some understanding of this most basic relation. This is why much of the so-called dialogue between theology and science is useless and why Darwinians cannot refrain from doing theology.

Secondly, a proper understanding of the God-world relation necessitates a real distinction between theology and the sciences such that neither be reduced to nor simply derived from the other. Inasmuch as creation is the gratuitous gift of being to a world that is *not* God, and

2. D.C. DENNETT, *Darwin’s Dangerous Idea: Evolution and the Meanings of Life*, Simon and Schuster, New York 1996, 63.

3. For a fuller, Trinitarian development of these themes, Cf. M. HANBY, “Creation without Creationism: Toward a Theological Critique of Darwinism”, in *Communio* 30 (Winter 2003) 654–694. Otherwise, this essay represents a further refinement of the views expressed there. See also two forthcoming essays, ID., “A Few Words on Balthasar’s First Word”, in R. HOWSARE – L. CHAPP (eds.), *How Balthasar Changed My Mind*, forthcoming from Crossroads and “Creation as Aesthetic Analogy,” in T. J. WHITE, O.P. (ed.), *The Analogia Entis* forthcoming from Eerdmans.

inasmuch as the being of the world is therefore irreducible to the being of God, it follows that the sciences are irreducible to theology. We must therefore deny that scientific conclusions can simply be deduced from theological premises or that properly theological conclusions can simply be inferred from scientific or empirical starting points. It is not up to theology to adduce the mechanisms of evolutionary development, and it does not fall to the sciences to infer the Incarnation or even to delineate nature from grace, for as Balthasar notes, the creature of itself is incapable of determining wherein it differs specifically from the creator⁴. There is thus an important truth in the notion that theology and science should each stick to their proper business--truth but not nearly the whole truth.

This is because, thirdly, the sciences remain constitutively and inexorably related to metaphysics and theology. The more vehemently a Dawkins or Dennett asserts his atheism, the more definitive and grotesque his theology becomes. If this is true, it follows that maintaining distinctions and keeping within limits *cannot* mean that theology and the sciences are only extrinsically and accidentally related to each other, or that theology and metaphysics deal with the whole and the sciences only with a part, as is sometimes argued.

This claim is simultaneously theological, philosophical, and historical. It is a claim about what is true in principle and how the sciences, particularly evolutionary biology, have unfolded historically. But it is important to distinguish *just how* the three aspects of this claim are formally related to each other. The historical point will become clear when we consider the origins of Darwinism. To claim philosophically that Darwinian theory *qua* scientific theory is constitutively and inexorably related to theology is to claim that this inexorable relation is inherent in reason's own intrinsic necessities *qua* reason and that it is phenomenologically visible, as it were, from the side of the object in our elementary experience of the actual world. The question "why something rather than nothing?", regarded by science as meaningless, is not just a question of ontological or temporal origins; rather it is a question of the ontological constitution

4. H. U. VON BALTHASAR, *The Theology of Karl Barth*, Ignatius Press, San Francisco 1992, 279.

of the world at every moment of its actual existence, a question of what is really *in* the creature, and so a question whose answer, as the tradition from St. Paul to Bonaventure affirms, is visible in principle to the sciences according to their particular modalities.

I wish to postpone this “phenomenological” point until we come to Darwinism *per se*, but David L. Schindler has made the case about reason’s intrinsic relation to God in a recent essay on the nature of scientific abstraction⁵. Schindler contests the presupposition behind the notion of “proper limits”, namely that “limit” as conceived in the scientific abstraction of parts from wholes is methodologically pure and metaphysically innocent. He contends that any attempt to distinguish between *x* and *non-x* – whether they be God and the world or the parts of a thing from its whole – entails a tacit conception of each. Embedded then within the very act of abstraction is an ontology and ultimately a theology that mediates what will count as the relevant (empirical) content of *x*. Inasmuch as *x* in its abstracted state is regarded as indifferent to or unaffected by *non-x*, the notion of limit or boundary inherent in abstraction *per se* and employed to distinguish *x* from *non-x* is akin to a Cartesian line, which divides two entities characterized in themselves by pure externality and which are thus fundamentally separate and external to each other. Consequently, intrinsic and constitutive relations are regarded as extrinsic and accidental, and the inner nature of *x* is taken to be unaffected by these relations. Thus the very notion of a metaphysically innocent, methodological abstraction expresses a mechanistic ontology that governs thought about the God-world relation.

Abstraction does not simply and innocently isolate a part from a whole; it also deals tacitly with the whole – the one actual world that *is* in relation to God – in its own proper mode through the attention given to the artificially isolated part. To deal with this or that isolated facet of the world, say the biological realm, is therefore always *also* to deal with the world in its relation to God, only from within the world according to the formal object of the science in question, in this case biology. The

5. D. L. SCHINDLER, “The Given as Gift: Creation and Disciplinary Abstraction in Science”, in ID., *Ordering Love, vol I: Creation and Creativity in a Technological Age*, forthcoming 2009 from Eerdmans.

same formal relation that holds between theology and philosophy thus holds analogously for all the sciences⁶. Each has in view the whole of being, with theology taking its stand “in God” and orienting itself toward the world and philosophy and the sciences taking their stand in the world and orienting themselves toward finite being and thus ultimately toward God. Of course there is an important difference. Unlike philosophy, which deals with being *qua* being, the natural sciences *do* deal with the whole of being through a “part”. Presupposing the whole, they are unable in principle to generate from *within themselves* the conditions for their own truth. The sciences thus remain tacitly dependent upon the “higher science” of philosophy as the traditional doctrine of subalternation held, and were the sciences in good order, they *would not* present the same *prima facie* case for ultimacy that philosophy does⁷. The history of both physics and biology shows that things haven’t exactly worked out that way, however, and inasmuch as the sciences are elevated to first philosophy in spite of their inherent limitations the truth of being – “what is?” – ceases to be of ultimate concern and is replaced by the criterion of experimental success⁸.

The philosophical aspect of the claim is not deduced from the theological, but it does exemplify in the cognitive sphere the world’s constitutive relation to God, just as the theological aspect brings the philosophical “to its senses”, as it were, and reveals its deepest import. *Theologically* speaking, we have already pointed to creation *ex nihilo* as the giving of the gift of *esse*, the gift of being *other than God*. But this being-other-than-God is the fruit and consequence of one’s interior and constitutive relation *to* God, a gift so deep and comprehensive that no analogy can

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6. My understanding of this relation is greatly aided by an as-yet unpublished paper from D.C. SCHINDLER delivered at a conference entitled *Theology and the Disciplines*, Philadelphia, PA, July 2008. For a more detailed account of how *esse* or *ens commune* opens of its own intrinsic necessities into creation, and thus how an implicit philosophical metaphysics entails an implicit theology, see my “Creation as Aesthetic Analogy...” cit.
 7. The reverse is also true, but I would contend that the relation is not symmetrical. Philosophy’s dependence upon science occurs *within* the context of science’s greater dependence upon philosophy.
 8. Claude Bernard gave paradigmatic expression to this shift. Cf. C. BERNARD, *An Introduction to the Study of Experimental Medicine*, Dover, New York 1957, 80.

adequately express, in all its force, the radical gift of being which God has given me... by creating me. For it is a gift totally interior to me; nothing is left out of it, and nothing of myself is without it⁹.

This gift is immediately distorted when represented as a qualification of the creature, something done *to* it, which is why Aquinas denies that creation properly speaking is action, passion, motion, or any other species of change and insists instead that it is a *relation* of the effect to the cause. Creation in the passive sense simply *is* the creature, but it is the creature as a certain *reception* of being as *act*, the “evidence” for which is simply the *novum* that is the creature itself, the irreducible novelty, depth and actuality of each concrete act of being as such. To “see” creation, then, is not to isolate some process or mechanism in the world. Rather it is to see the world more deeply and comprehensively. The importance of this point will emerge as we proceed. The thing to note at present is that inasmuch as the creature is constituted through the relation wherein it receives its being, this relation to God is at least implicit in all other relations whether real or rational. What therefore emerges from within reason’s own necessities, namely the inexorability of thought’s relation to God, is explained but not simply derived from a proper understanding of creation as such.

The same gift of *esse* which gives science its objects and the objects to themselves gives it to science to be and to be *other than theology*. But the sciences’ being “other than theology” is not *external* to theology any more than their objects are external to the gift of *esse*, so that “scientific autonomy” is not to be found in some illusory freedom from metaphysical and theological assumptions. To the contrary, the freedom of the sciences not to be theology is itself *theologically granted*, though obviously not in the juridical sense, and the sciences can only do justice to their own nature and to their objects when the gift is well received. There is no pure method, and no science can do and indeed ever does without a metaphysics and therefore ultimately a theology whose “axioms” with respect to being, time, space, matter, motion, truth, knowledge, and God

9. H. DE LUBAC, *The Mystery of the Supernatural*, Crossroad Herder, New York 1999, 77.

are not simply “presupposed” at the boundaries of the science where they can be bracketed in the name of methodological purity. Rather like Aristotle’s principle of non-contradiction, they are operative throughout because they are first in the order of being and thus impose themselves upon the very act of thinking, even if they are last in the order of reason by which we cognize them¹⁰.

This raises a number of issues that I can only indicate here, though I do hope to shed some light on them in my assessment of Darwinism. If the truth of being does impress itself upon the act of thinking as such, then this truth must be more basic than any deviation from it. If all our attempts at rejecting the gift presuppose the gift, then the truth of being must shine through even in falsehood. Aristotle must therefore be right when he contends that we cannot really *disbelieve* this truth and insists that those who claim to disbelieve it simply do not know themselves. Likewise, I want to say that there is a strict sense in which Darwinism is simply unbelievable and unbelieved – even by those who adhere to it religiously – because the fundamental logic of Darwinism is contradicted by our living, thinking and acting.

This brings me to my final introductory point before our consideration of evolutionary biology. On the one hand, it follows from all this that theological criticism of Darwinian biology must be *theological* and not scientific: it must be a criticism of the theology that Darwinism invariably presupposes and inevitably tends to become. It should attempt to straightforwardly deny this or that piece of biological data. It should not endeavour to propose an alternative “mechanism” to natural selection, to show how God “uses” natural selection in some kind of “theistic evolution” or to supply some other kind of questionable concordism between theology and science, though neither am I proposing an a priori “discordism.” On the other hand, inasmuch as all natural sciences are constitutively and inexorably related to theology, scientific accounts of nature which are metaphysically and theologically deficient cannot help being deficient *qua natural* and *qua scientific*. Rather good theology liberates the sciences to be science and, moreover, performs for them a service without which they will tend to falsify themselves and their objects. So

10. Cf. ARISTOTLE, *Metaphysics* IV, 1005b-1009a.

the question is “what is this service that theology performs for Darwinian biology?”

In brief, I want to maintain that theology “saves the appearances” for biology. It does so precisely through saving the “more than appearance” inherent within appearance itself, a “more” upon which the truth of appearance depends and which the scientific quest in fact assumes¹¹. So in saving the appearances for biology the doctrine of creation saves for biology the truth of the biological world as an order of inherently intelligible and thus meaningful living wholes irreducible to the sum of their parts, their antecedent causes and indeed to any true account we can give of them. This also happens to be the truth from which Darwinism begins and which, in spite of itself, it is incapable of denying. Yet for all its genuine achievements in giving us knowledge of the biological world, it remains, or so I contend, constitutively incapable of seeing or accepting what it otherwise *cannot help but see* and what every known historical culture save ours *has seen*, however dimly¹². You might say that Darwinism is premised upon the denial of the obvious. And yet insofar as the obvious precisely as obvious is undeniable, this means that Darwinism is strangely irrational, whatever the truth of this or that thesis.

I would suggest it is precisely in “saving the appearances” that theology addresses this powerful objection: that science in general and Darwinism in particular *work*. For any theory whose legitimacy ultimately requires the strictly impossible task of holding as effectively unreal the world that we cannot help believing in and which is affirmed in our every action cannot in any ultimate or fundamental sense, *work*, and its “not working” is not only theoretically demonstrable, but practically evident in virtually every facet of our disintegrating culture. The real question is whether our Darwinized culture is finally committed even to any coherent notion of “working” or whether it has grown weary of the claim of truth.

11. Cf. VON BALTHASAR, *Theo-Logic* I, 55-107.

12. Cardinal Ratzinger contends that knowledge of the world as in some sense “created” by God is “primordial knowledge” belonging to our birthright as human beings. It is simply (and appropriately) whiggish simply to chalk this up, as Darwinians do, to the primitivism of all pre-Darwinian peoples. Cf. RATZINGER, “*In the Beginning...*” cit., 27-32.

Yet even the rejection of truth stands within a relation to it, manifesting in negative form its claim upon us. Assuming, then, that Darwinism is neither able nor willing to relinquish this claim entirely, I would maintain that in “saving the appearances”, in giving account of what Darwinism must presuppose but cannot receive or explain, the doctrine of creation, though *not* the antithesis and therefore a strict rival of evolutionary theory, may nevertheless lay greater claim than evolutionary theory to *rationality*¹³. According to Alasdair MacIntyre’s conception of tradition-based rationality, the more rational of two rival theories is the more comprehensive theory, the one that can accommodate both the truth of its opponents’ theses and those features of life that have heretofore proved intractable. In brief, he who sees the most wins.

REFUSING THE GIFT. To understand how creation “saves the appearances” for biology we must first understand why the appearances need saving. And to grasp this we need to understand the particular form that Darwin’s constitutive and inexorable relation to theology takes. This requires us to situate Darwin within the broader élan of modern science since the seventeenth century, which Pope Benedict aptly sums up in the words of Francis Bacon as “the triumph of art over nature.”¹⁴ Aristotle had of course premised his natural philosophy on the world of actual things – *this somethings* – that were simultaneously subjects of both a common “whatness” (form) and an irreducible and incomprehensible singularity. This invested things existing by nature with a mysterious interiority. Moreover, precisely because every “this” is always also an actual “what”, it is already a something that “belongs” to the heterogeneous places where things find themselves and flourish in the course of their actual existence. When things in their places move from potentiality to actuality, as when an acorn matures into an oak, it does so according to what Aristotle calls “natural motion,” and its movement manifests what it is to be an acorn-

13. A. MACINTYRE, *Whose Justice? Which Rationality?* Notre Dame Press, Notre Dame 1984, 349-369.

14. BENEDICT XVI, *Spe Salvi*, 26; F. BACON, *Novum Organum* I, 117.

oak tree. As Joe Sachs puts it, “it matters to things where they are”¹⁵. By contrast, when an acorn is kicked across a road, as when any entity passes through homogenized Newtonian space, its motion reveals nothing of what it is to be an acorn; indeed all the relevant variables here and even the acorn itself are interchangeable with any other so long as these possess the relevant mathematical properties. This Aristotle called “violent motion”, and where it is taken as the paradigm of motion *per se*, as in a mechanistic ontology, there is an important sense in which the actual world falls from view. And so Aristotle says “the person who asserts this entirely does away with “nature” and what exists “by nature”¹⁶.

The stress on activity or actuality is crucial here. Considered nominally or abstractly from within the mechanical conception of causality paradigmatically expressed by Galileo, “that at whose presence the effect always follows and at whose absence it disappears”, a builder is the cause of a house¹⁷. But for Aristotle, strictly speaking, he is only the *potential* cause of a house. The *builder building* is its actual cause, which is only realized in and with the effect: he *is causing* the house only *as the house is being built*, a change of condition that it actively “undergoes”¹⁸. Something analogous is true of a being who when thought of as “potentially living” can always be analytically separated and imagined abstractly as somehow prior to a world to which it is otherwise accidentally related. But actually living things and their world, like movers and moved when in the *act* of moving, comprise “a single actuality of both alike”¹⁹. So Aristotle says in *De Anima* II that the soul and its “external” objects when in the second actuality of knowing, touching, seeing, hearing, eating and living – dare we say, when in the *act of be-ing* – comprise a *single actuality* while nevertheless remaining distinct. This “single actuality” of a “this something” and its world alike may be one reason why Aristotle makes touch the primary

15. J. SACHS, *Aristotle's Physics: A Guided Study*, Rutgers University Press, New Brunswick 1995, 58.

16. ARISTOTLE, *Physica*, 199.b13.

17. E.A. BURTT, *The Metaphysical Foundations of Modern Science*, Dover, Mineola 2003, 72-104.

18. ARISTOTLE, *Physica...* cit., 201a15-202a37. See also, *De Anima*, 417b29-418a7; 425b27-426a26, 431a8. Cf. J. LEAR, *Aristotle: The Desire to Understand*, Cambridge University Press, Cambridge 1988, 26-42.

19. ARISTOTLE, *Physica...* cit., 202a18-19.

sense and why this accords so profoundly with his notion of heterogeneous place, defined as “the boundary of a containing body at which it is in contact with the contained body”²⁰. Touch on this understanding is not simply one of the senses, or one activity of the senses, though of course it is also both, but rather that sense through which any animate being always and at every moment intersects with and belongs to its world. Analogously, hearing, sight and knowledge in their own modalities actualize a similar unity between a thing and its world, indeed between a thing and what Aquinas would call *ens commune*. At this fusion of boundaries, which always already accompanies the organism and indeed encompasses it on every side, “biological insides and environmental outsides” are not two contiguous, but externally related realms, otherwise separated by an abyss and requiring some mechanism as a *tertium quid* to account for their artificial “interaction” or “relation”²¹. Rather, inasmuch as they are *in act* – breathing, seeing, touching, eating, doing, living – “being” – they comprise a single actuality, the actuality of *kosmos*, maintaining distinction without separation. Teleology in Aristotle’s deep sense is not the external imposition of a purpose “not one’s own” and thus otherwise foreign to the thing. It simply affirms that each living creature is a “this something” transcending itself through its intrinsic relation to a world which its essential presupposition, something that unfolds and moves in characteristic ways “for the sake” of the thing it already is. This then ought to lead us to ask just of what the denial of teleology is actually denying.

The interiority proper to Aristotelian nature was only deepened as it was subsumed within a Christian conception of creation understood as the gratuitous gift of *esse*. While Aristotle grasps the equi-primordiality of the common and the singular (*tode ti*) perhaps more profoundly than any pre-Christian thinker, there nevertheless arguably remains in Aristotle a double ambivalence with respect to difference *qua* difference. On the one hand, inasmuch as forms themselves express a thing’s ultimate difference from every other thing, difference *qua* difference acquires such pride of place in his philosophy that it threatens the unity of the Aristo-

20. *Ibid.*, 212a5-7.

21. The terms are from S. J. GOULD, *The Structure of Evolutionary Theory*, Belknap Harvard, Cambridge MA 2002, 161.

telian cosmos, as evidenced perhaps by the ambiguous relation between the Unmoved mover and the fifty-five or so unmoved movers responsible for celestial motion²². Here below, on the other hand, because the form is the *logos* of the thing expressed noetically in its definition, only the form is intelligible in the strict sense (i.e., while “man” has a definition, Socrates does not). As a consequence, Aristotle tends to regard that difference in virtue of which a thing is not identical to its form, whether it be that which distinguishes Socrates *qua* Socrates or that whereby the female imperfectly instantiates the form of man, as the limit of a thing’s capacity for imitation or identity with God²³. In brief, difference *qua* difference remains a deficient reflection of an ontologically more basic unity, a problem that none of the ancients were able adequately to resolve²⁴.

The Incarnation occasioned a revolutionary re-thinking of this problem from the side of both God and the world. For entailed in the claim that Christ is at once very God and very man without admixture, blending or diminution was not only an acknowledgment of the full divinity of the second hypostasis of the Trinity but, concomitant with this acknowledgment, the first genuine thinking of divine transcendence, a transcendence so radical as to include reflexivity and reciprocity within itself and the capacity for intimate relation to what is not itself, without losing its own otherness or dialectically negating the world. This made it possible to articulate the long held conviction of creation *ex nihilo* in ontological terms. Because God is Wholly Other to the world, he is able, as St. Augustine put it, to be closer to the world than it is to itself as the gratuitous source of its being. Thomas’ transformal category of *esse* as the act of acts and the most fundamental and interior of perfections gave technical specification to this conviction, simultaneously completing the classical (Aristotelian) conception of nature and transforming it to its

22. Cf. J. OWENS, *The Doctrine of Being in the Aristotelian Metaphysics*, Pontifical Institute of Mediaeval Studies, Toronto 1978, 457-460, 438-453.

23. For a generous treatment of this ambivalence, Cf. K. L. SCHMITZ, “Immateriality Past and Present,” in ID., *The Texture of Being: Essays in First Philosophy*, Catholic University of America Press, Washington 2007, 168-199.

24. That is to say that Plotinus does not adequately resolve it either, but the defense of this claim would take us too far afield.

very roots. For as Socrates is transformed from a “*this-something*” into a *creature*, he becomes an irreducible and infinitely irreplaceable “I”, who as the fruit and object of love is good and like God not in spite but *because of* his very difference from God. Because being is the most interior gift, nothing falls outside it, and nothing – not Socrates’ individual identity, not the body – is excluded from it. Thus what classical philosophy could only regard negatively as the incomprehensibility of Socrates, Christianity regards positively, seeing in the *very incomprehensibility* of Socrates the reverse side of an *infinite* intelligibility coincident with a bottomless depth of mystery. Because Socrates is not his own ground, because the infinite mystery of God is at the bottom of everything, the incomprehensibility of Socrates is the sign of a surplus gratuity, a self-transcending communication internal to every concrete act of being as such. So Thomas tells us that there is a multitude of creatures because no one creature could adequately represent the divine goodness and beauty²⁵.

When the natural philosophers of the seventeenth century uniformly rejected Aristotle’s substantial form and its corollary distinctions between act and potency and variegated causality, they dispensed with the primacy of the *actual* world in the senses I have just described it. First, they dispensed the depth of interiority constitutive of actual, irreducible being. Second, they thereby transposed the world of *things-in-the-act-of-being* – a world comprised not just of builders, as it were, but a world of *builders building* – into a static world of discrete entities. One is tempted to say that modern science is premised to this extent upon a *stilling of the world*, a reduction of the ungraspable vitality of *dunamis* and *energia* to a dense sequence of measurable *states*. In this view, change is not significant in its very character as act, namely, the actuality of potential *qua* potential²⁶. Rather, change (or motion) is but the measured difference between *states*, which, in themselves, are indistinguishable from their opposites²⁷. This metaphysical ges-

25. AQUINAS, *ST I.47.1*.

26. Descartes, e.g., thought the notion unintelligible. Cf. R. DESCARTES, *The World, or Treatise on Light*, in J. COTTINGHAM - R. STOOHOFF - D. MURDOCH (trans.), *The Philosophical Writings of Descartes I*, Cambridge UP, Cambridge 1985, 94.

27. Simon Oliver makes this point with respect to Newton, that motion and rest are for him quantitatively different instances of the same state which are indistinguishable because motion now communicates nothing of the object moved. Descartes anticipated Newton on this score by defining motion as a state. Cf. DESCARTES, *Principles*

ture then fundamentally transforms our view of motion and it is a fundamental reason why life has largely ceased to be the subject matter of biology. For within this ontology life, as Hans Jonas indicates, is merely an anomalous state of non-life or death, of the inanimate understood as inert²⁸. Darwin, tellingly, exhibited no interest in the difference between the animate and the inanimate. Like Newton's famous declaration with respect to gravity – "*hypothesis non fingo*" – he declined to speculate as to life's origin or essence. To measure it was enough to know it²⁹. With natural philosophy now indifferent to the ontological significance of act, being and the properly metaphysical question of "why anything at all?" loses its force and intelligibility. The question of being becomes equal to the sum total of things there are, which in turn becomes equivalent to the various possible or actual configurations of formally identical *quanta*. In short, early modern natural philosophy ushers in what Balthasar calls the "sick blindness" of positivism, the sense that the world provokes no questions and is "just there", and it paves the way for the elevation of physics to the place of first philosophy³⁰. What is objectively the demise of the actual world of *cosmos* is subjectively the death of philosophical wonder depicted so powerfully by Balthasar, wonder which is the primitive form of cognition's participation in being-as-gift³¹.

Commencing with what Galileo approvingly called "the rape of the senses" and employing variations of the "principle of annihilation" initially prominent in the voluntarism and nominalism of Ockham, the nascent natural philosophers skeptically demolished the actual world of lived experience, making it the secondary product of external forces acting on a *counter-factual* world of singulars persisting in a state of inertial isolation³². We have hardly begun to reflect upon the theoretical

of Philosophy II.27; CSM, 234. S. OLIVER, *Philosophy, God, and Motion*, Routledge, London - New York 2005, 168.

28. H. JONAS, "Life, Death and the Body in the Theory of the Being", in *The Phenomenon of Life*, Northwestern UP, Evanston 2001, 1-37.

29. C. DARWIN, *On the Origin of Species*, Prometheus Books, Amherst 1991⁶, 401.

30. VON BALTHASAR, *Theo-Drama II: Dramatis Personae: Man in God*, Ignatius Press, San Francisco 1990, 286.

31. ID., *Glory of the Lord V: The Realm of Metaphysics in the Modern Age*, Ignatius Press, San Francisco 1991, 613-614.

32. On the importance of counterfactuals and their new use in modern natural philosophy, Cf. A. FUNKENSTEIN, *Theology and the Scientific Imagination: from the Middle Ages to*

and spiritual significance of this founding gesture of modern science to premise the real world upon the unreal. Needless to say, the result is a fundamental reformation of the meaning of order and unity, both cosmic and soon enough organic, as the difference between the animate and inanimate, the natural and the artificial would soon suffer the same fate as the distinction between motion and rest. Aristotle's universe was one because relationality, implicated in the very nature of act, was ontologically basic. All things were intrinsically related to the pure actuality of the One (the etymological meaning of *uni-versus*), which accounted for their endeavor to remain in being *and* through which they were inherently related to their world. The uni-verse was thus an *ordo ad invicem*, as Aquinas would put it, a mutually supporting order because things were intrinsically "ordained toward each other (*ad alia ordinantur*)". In brief, beings were *at home* in their world; they *belonged* to it, because they were indeed beings.

The advent of the thoroughly singular, self-identical thing would reduce all things in their ontologically primitive condition to the status of brute *quanta*, whose most essential characteristic is sheer externality³³. In its ontologically primitive form each thing becomes formally identical to every other thing, and all relations are secondary, extrinsic, and therefore accidental in both the scholastic sense and soon enough in the ordinary sense of occurring *by mistake*, as a failure of "replicative fidelity." We see this curious notion in Jacques Monod's and Richard Dawkins' accounts of genetic variability, which echo the classical ambivalence about difference., as variations reflect, in Dawkins' case, the "failure" of genes³⁴.

the Seventeenth Century, Princeton UP, Princeton 1986, 177 ff.

33. Though Newton vehemently protests Descartes' identification of the essence of body with extension, since the separation of extension from body was necessary to his crucial notion of absolute space, Descartes' geometrization of the "essence" of matter and Newton's identification of matter with mass and Descartes' geometrical matter are united in this fundamental characteristic: each in itself is fundamentally external and thus constitutes an impervious boundary, dividing absolutely what lies on either side of it. Cf. DESCARTES, *The World...* cit., CSM I, 90-98; I. NEWTON, "De Gravitatione et Aequipondo Fluidorum", in A. R. HALL - M. B. HALL (eds.), *Unpublished Scientific Papers of Isaac Newton*, Cambridge UP, Cambridge 1962, 138-140.
34. R. DAWKINS, *The Selfish Gene*, Oxford University Press, Oxford 1989, 17-18, 21-45. In Dawkins' case, genetic variability refer to the failure of genes to extend their immortality by reproducing themselves perfectly "in the *form* of a copy", a notion long on metaphysical presumption but short on metaphysical reflection.

With the demise of the universe as a single actuality, the unity of the cosmos becomes the unity of an aggregate, an assemblage of inherently indifferent and *unrelated quanta* requiring an *extrinsic* principle of order, a mechanical *tertium quid* that imposes “law” through power (force) to account for its unity³⁵. The unity of an organism would soon follow suit, as each living thing would eventually stand to its own quiddity in more or less the same external and artificial relation as obtained for Aristotle between Antiphon’s bed and its wooden substrate³⁶. For Aristotle and the tradition artifice imitated nature (in the “negative” sense) because artifacts did not possess being of their own. Lacking essential and existential interiority, they received their forms from outside, as it were, and their meaning lay in the purposes of their artificer. From the seventeenth century onward, nature identified alternatively with the brute *quanta* of positive matter and the extrinsic laws governing their accidental interaction would imitate artifice before being collapsed into artifice altogether. To “know nature” is then is to know the laws governing the artificial construction of machines and organisms alike, and to know these laws is to be able to make or unmake nature in accordance with them³⁷. That is, to know nature in the modern sense is already to have exerted command over it.

In reality the unity of an artifact differs fundamentally from that of an organism. In contrast to the tree from which it was made, Antiphon’s bed is not an *unum per se*. It does not transcend itself, move itself, generate another like itself, or assimilate the world to itself through metabolism. The parts do not derive their being and meaning as parts from the whole which it will become, much less do they develop for its sake. It is not, in other words, the subject of its own being. We can ask, in the words

35. Neither Newton nor Descartes identify the “essence” of force (a notion whose conceptual position Descartes occupied with “quantity of motion”), but there are reasons for suspecting that each identified it with God.

36. On the demise of interiority and a meaningful distinction between the animate and inanimate, see the work of Hans Jonas in general but particularly H. JONAS, “Is God a Mathematician? The Meaning of Metabolism”, in *The Phenomenon of Life*, 64–98. On an analysis loss of the distinction between motion and rest Cf. OLIVER, *Philosophy, God...* cit., 156–190. For hints at the correlation between these and the demise of the act-potency distinction, Cf. BURTT, *The Metaphysical Foundations...* cit., 72–104.

37. See the definition of nature given in DARWIN, *On the Origin of ...* cit., 60.

of Thomas Nagel's famous essay, "What is it like to be a bat?" We might even ask what it is like to be a plant or the one-millimeter in length roundworm *C. elegans*. After all, even a *C. elegans* transcends itself in a certain limited sense inasmuch as it *is* and *is one*. It "has a world" of ambient bacteria toward which it is metabolically oriented, and even though possesses an identical number of cells (935), *this C. elegans* can never *be that C. elegans*. There is an infinite existential difference between them.

Where we might ask what it is "like" to be a bat or a *C. elegans*, "Nobody would ask what it is like to be a car". «Being a car», says Robert Spaemann, «is not *like* anything, because a car does not *exist* in other than a purely logical sense»³⁸. Why? Because an artifact does not have being of its own, and lacking that, does not "have" a world. Its form is "external" to it, for as Aquinas puts it, "*we* are in a sense the end of all artificial things". I would want to qualify this in important ways in the case of artifacts whose point is not the useful but the "pointlessness" of beauty or play. This "pointlessness" imbues them with a kind of integrity of their own, independent of their artificer, a kind of being on loan by which they may exist both "for their own sake" and "for another", making it possible for them to indeed "imitate nature" in the deepest and most positive sense and for artifice to supply a faint reflection of divine creation in spite of the infinite difference between divine and human making³⁹.

Indeed were biologists to approach their subjects as one approaches a painting, it would no doubt transform the very meaning of science, restoring it to *theoria* in the traditional sense⁴⁰. Nevertheless it is *useful* or functional artifacts that have always fascinated biology. It is surely telling that some of Darwin's most radical contemporary defenders are more eager than Darwin to erase any essential difference between the animate and the inanimate and to stress the 'designed' or 'artificial' character of organisms⁴¹. And it is surely no accident that some of these acolytes have

38. R. SPAEMANN, *Persons: The Difference between "Someon" and "Something"*, Oxford UP, Oxford 2007, 30.

39. AQUINAS, *In Metaph.*, lecture 4, 173.

40. This is in fact what Adolf Portmann does in inquiring into the significance of animal *gestalt*. A. PORTMANN, *Animal Forms and Patterns: A Study of the Appearance of Animals*, Schocken Books, New York 1952.

41. DAWKINS, *The Blind Watchmaker: Why the Evidence of Evolution Reveals a World without Design*, W.W. Norton, New York 1996, 21-41.

little scruple about the biotechnical manipulation of the “human person”, to them a quaint relic of folk biology⁴². In his post-humanist manifesto *Re-Designing Humans*, UCLA biophysicist Gregory Stock writes,

Over the past hundred years, the trajectory of the life sciences traces a clear shift from description to understanding to manipulation... In the first half of the twenty-first century biological understanding will likely become less an end in itself than a means to manipulate biology. In one century, we have moved from observing to understanding to engineering⁴³.

Stock probably does not mean to say that biology is unconcerned to understand organisms, but he is inadvertently correct. Biology is no longer interested in understanding organisms in the strict sense of knowing “what is” (*ens*) precisely because biology has emptied organisms of the interiority of their own being and essence, mechanically reconfiguring this interiority as the functional interaction of so many externally related parts. This alters both the ideational content of our knowledge of organisms and the ideal criteria for knowing them, transforming knowledge from a “knowing what”, in Hans Jonas’ slogan, to a “knowing how”. Leon Kass is right, however, that even this distinction is problematic, for mechanical “know-how” of an organism is at best limited and at worst misleading, since it is purchased by abstracting the relevant feature of the organism – its genomic structure, for instance – from the only place where it is ever actually encountered: life as lived by teleological wholes in the actual world⁴⁴. In short, there can only be mechanism because there are first things, *beings*, which are irreducible to mechanism. If modern biology does not grasp this, if it can scarcely see the phenomenon of life as lived even as it cannot help *but* see it, this is because the trajectory from understanding to engineering is not simply the result of the empirical and experimental successes of modern biology. It has been inscribed

42. See the statement of the International Academy of Humanism, signed by Francis Crick, Dawkins, and Dennett among others, in support of human cloning. It is included in L. KASS, *Life, Liberty, and the Defense of Dignity: The Challenge for Bioethics*, Encounter Books, San Francisco 2002, 136-137.

43. G. STOCK, *Redesigning Humans: Our Inevitable Genetic Future*, Houghton Mifflin, New York 2002, 1-18, 35-57.

44. KASS, *Life, Liberty...cit.*, 277-297.

into our understanding of nature since the 17th century. In its inner logic, modern biology was always already biotechnology.

Though the Darwinian faith has many fathers, it is by all accounts Darwin himself who effected the celebrated revolution in our self-understanding and he who is credited, in the modest words of Gaylord Simpson, with rendering worthless all accounts of who, what and why we are published before 1859. Yet a significant portion of the credit for importing Newtonian mechanism into biology belongs to the Anglican clergyman William Paley. Paley's *Natural Theology* is a footnote in the history of theology but a landmark in the history of biology and to this day a favorite foil of Darwin's most ardent defenders, who regard it as the apex of Christian thought on creation⁴⁵. The appearance of a fundamental disagreement between Darwin and Paley is an illusion, however. What unites them is far more profound than what divides them, and what unites them are certain metaphysical and theological assumptions that ground the science.

You will no doubt recall the famous argument, recently rehabilitated by proponents of Intelligent Design, where Paley walks across an imaginary heath, discovers a watch with its intricate and interdependent parts suited to a common purpose, and infers, correctly as it happens, that it must be a designed artifact. Paley is an object lesson in the difference between philosophical wonder and positivist admiration described by Balthasar⁴⁶. The *existence* of the heath is a given and uninteresting. He exhibits no wonder at all in the fact that Balthasar called astonishing beyond measure, the fact that *he is*. In other words, the question of being and thus of creation proper never comes close to arising. He is far more interested in the difference between a stone and a watch than in the difference between a man and a watch. In fact, his argument depends upon eliminating this difference as much as possible, emptying nature of any inherent meaning or internal principle of unity or order – which he takes to be the mere re-description of a fact rather than the diagnosis of

45. Cf. DAWKINS, *The Blind Watchmaker*... cit., 1-41.

46. VON BALTHASAR, *The Glory of the Lord* ... cit., 613 ff.

a cause – in order to warrant the inference of an *external* artificer, which he regards as an *alternative* to any natural process⁴⁷.

I trust that I hardly need to note how incoherent is this view of a finite God, in competition with natural processes and impervious in principle to any serious qualification by Trinitarian or Christological reflection, or how such a God, being only extrinsically and accidentally related to creatures who are fully transparent to mechanical diagnosis, sows the seeds of his own irrelevance. This is inadvertently confirmed by contemporary advocates of Paley's theory, who stress that assent to a designer for those "irreducibly complex" features of the world otherwise indistinguishable from the world of neo-Darwinian biology does not necessitate commitment to God; one of Francis Crick's space aliens could do just as well⁴⁸. Paley himself concedes as much; indeed he seems positively relieved by it, acknowledging that divine Providence understood on these terms "neither alter(s) our measures nor regulate(s) our conduct", functioning instead merely "as a doctrine of sentiment and piety"⁴⁹. He then applies this doctrine of sentiment and piety by analogy to living things reconceived as mechanical contrivances, as clusters of parts externally related and indifferent in themselves, requiring the external hand of God to account both for their mutual correlation to each other and for the fit between biological insides and environmental outsides.

This problem of providing an extrinsic mechanism to account for the relation of part to part and the fit between organism and environment in a Newtonian world where nothing properly *belongs*, Paley names *adaptation*, and he bequeaths it to Darwin as the defining problem of evolutionary biology⁵⁰. In bequeathing this problem to Darwin, Paley determines what Darwin sees when he looks at organisms: "a cluster of contrivances"⁵¹. And he supplies the metaphysical and theological archi-

47. W. PALEY, *Natural Theology*, Kessinger, Whitefish, MT 2003, 42.

48. M. J. BEHE, *Darwin's Black Box: The Biochemical Challenge to Evolution*, Touchstone, New York 1996, 248–249.

49. PALEY, *Natural Theology*... cit., 286.

50. Cf. GOULD, *The Structure of Evolutionary* ... cit., 118.

51. PALEY, *Natural Theology*... cit., 109. According to Darwin, «When we no longer look at an organic being as a savage looks at a ship, as something wholly beyond his comprehension; when we regard every production of nature as one which has had a long history; when we contemplate every complex structure and instinct as the summing

ture necessary to see it: an extrinsicist view of a finite God in competition with natural processes and the positivism, nominalism and atomism which are mechanism's essential warrants and presuppositions. Hence by the time Darwin gets around to finishing off Paley's God, replacing the invisible hand of Paley's designer with the invisible hand of natural selection, the decisive move will have already been made. In making the problem of adaptation and the view of the organism as a cluster of contrivances his own, Darwin makes Paley's flawed theological presuppositions his own. It makes little difference whether he affirms them for the sake of denying them as he and his disciples do or whether affirms them for the sake of assenting to them as Paley and Intelligent Design advocates do⁵². Darwinian biology, in other words, is inexorably and constitutively related to an extrinsicist theology which effaces the difference between God and the world, transforms the organism into a machine, and reduces creation to manufacture. Paley and his modern admirers are ostensibly for this truncated God, Darwin and his disciples against, but they might as well be arguing over how many *C.elagantia* can dance on the head of a pin for all its relevance to a proper understanding of creation.

Darwin by his own recollection knew Paley frontward and backward; indeed the *Natural Theology* leaves tracks all over the *Origin of Species* if one knows where to look, and Darwin admits in the *Descent of Man* that the principal preoccupation of the *Origin of Species* was overcoming the "ordinary sense of creation" in order to *replace* it with a natural explanation⁵³. Thus, according to Stephen Jay Gould, Darwin "*inverts*" Paley, gleefully replacing the aesthetics of Paley's happy world with the aesthetics of Malthusian scarcity, thereby effecting "*a substitution* of natural se-

up of so many contrivances, each useful to its possessor, in the same way as any great mechanical invention is the summing up of the labour, the experience, the reason, and even the blunders of numerous workmen; when we thus view each organic being, how far more interesting – I speak from experience – does the study of natural history become». DARWIN, *On the Origin of ...* cit., 405. See also his discussion of "the aggregate of characters" relative to classification, 349 ff.

52. Darwin's negative references to "creation" in the *Origin* are too numerous to catalog, but sufficient to establish it as a reaction that preserves within itself the image of what it rejects.

53. Cf. GOULD, *The Structure of Evolutionary...* cit., 116-121, 260-277; DARWIN, *The Descent of Man*, Prometheus Books, Amherst 1998, 62.

lection for God as creative agent”⁵⁴. The argument, which Darwin quite candidly calls “the doctrine of Malthus, applied to the whole animal and vegetable kingdoms”, is by now quite familiar, as are the formal features of mechanism we have already discussed. Like Malthusian persons, Adam Smith’s *homo economicus*, or Newtonian masses, Darwinian organisms are diverted from their inertial tendency (toward exponential reproduction) by the pressures of scarcity, the ensuing hardships bringing them into a state of equilibrium akin to the equilibrium obtaining between supply and demand in the market. Given the empirical fact of variation between generations and a strong principle of inheritance, those variations are likely to be selected and preserved which afford their possessor a competitive advantage against both its environment and closest kin, allowing them and their offspring to secure a niche within a biogeographical division of labor. Couple the extinction of closest relatives that eventually results from this constant culling process with the vast time scales posited by Charles Lyell’s uniformitarian geology, and the result is eventually branching *taxa* and divergent species⁵⁵.

Like Paley, Darwin too is interested in the organism as a cluster of contrivances, and he does acknowledge the phenomenon of “correlated variation” whereby «the whole organization is so tied together during its growth and development, that when slight variations in one part occur, and are accumulated through natural selection, other parts become modified»⁵⁶. Even so, Darwin is arguably even less interested in the organism for its own sake, being concerned on the one hand to stress the organism’s non-functional traits to counter arguments from design and on the other, to dwell on functional complexity only insofar as its existence can be plausibly explained through natural selection⁵⁷. Darwin thus represents a further shift toward functionalism in the meaning of both explanation and the *explananda*. As the subject of Newtonian physics is not motion *per se* but force, so the subject of Darwinian biology is not really life or the organism but natural selection, portrayed in force-like terms as the “subject” of its own activity. Natural selection thus becomes

54. GOULD, *The Structure of Evolutionary...* cit., 113, 127.

55. DARWIN, *On the Origin of ...* cit., 3.

56. *Ibid.*, 100, 108.

57. Compare, e.g., their respective treatments of the nature and origin of the eye.

the principle of organic unity in a thoroughly accidental world, though not without radically altering the meaning of this unity. This is evident when Darwin makes the astonishing comparison between the 'natural law' of natural selection, operating on the parts of organisms to the natural laws operating on stones fallen from a precipice.

In the same manner the variations of each creature are determined by fixed and immutable laws; but these bear no relation to the living structure which is slowly build up through the power of selection, whether this be natural or artificial selection⁵⁸.

Now there seem to be a number of problems with the internal coherence of all this. These stem ultimately from Darwin's (unacknowledged) metaphysical and theological starting points, though, as we shall see, acknowledging this need not involve us in a wholesale rejection of Darwin's theory. As heir to the economic theory and social theodicy theory of Smith and Malthus, Darwin's theory belongs among the great eighteenth and nineteenth century attempts to provide a logic for contingent history, a kind of secular providence which accounts for all biological and even cultural life as the outworking of a single transcendental process – hence the need to refer to it in force-like terms. To this extent, natural selection belongs in the realm of metaphysics. Yet if as a mechanist and a nominalist Darwin has foresworn universals, and if as science, Darwinism has foresworn metaphysical speculation, how on its own terms can it justify its appeal to a transcendental mechanism? How can Darwin justify appeal to a universal like natural selection while denying in his nominalism the reality of all other universals such as natures, essences, and real relations? How on the terms of Darwin's own commitments can we justify designating disparate events in the lives of bacteria, beetles, trees, fish and nations as instances in the operation of a single process? Why is natural selection, like the very conception of species itself, not simply a term of convenience? Why, in other words, does the universal acid of Darwinism stop short of dissolving itself?

58. DARWIN, *The Variation of Animals and Plants under Domestication* vol. 2, Murray, London 1868, 348-349, qtd. in GOULD, *The Structure of Evolutionary ...* cit., 341.

Perhaps a Darwinian will reply that natural selection is not a “single mechanism” at all but merely a “single name” generically unifying a vast array of causal transactions⁵⁹. This, presumably, would stave off the allegations of an illicit metaphysics, notwithstanding nominalism as a metaphysical stance. Yet if natural selection is merely a single name, what then makes *this* unity more than nominal, arbitrary, and convenient? And how can Darwinians justify their continued reference to natural selection in force-like terms as if it were the subject of its own action? Natural selection, it is said, acts, causes, and creates⁶⁰. Does this rhetorical card trick not confuse effects with causes and merely re-describe a fact instead of stating a cause as Darwin himself alleges against Paley? And why, in this case, does the fact described by “natural selection” not really just mean “whatever happens”? This may be a great way to win every argument in advance since no evidence in principle could ever falsify the theory, and this is one reason why we need not simply reject Darwinism. Yet it is hardly an *explanation* to say that some things live and some things die. Darwinian biology must say *why* some things live and others die. Hence what many have argued is the perilously circular character of Darwinian fitness and the endless proliferation of the “just-so” stories of adaptive advantage criticized so persistently by Stephen Jay Gould, Richard Lewontin, and others⁶¹. These may be gross simplifications, but then Darwinism owes us an answer to some very simple questions: which species do *not* owe their existence to natural selection’s gracious hand, and how could we ever know it? Of course if Darwinism *can* answer these questions, then natural selection is dethroned as a controlling mechanism and Darwinian panadaptationism ceases to be a “theory of everything.”

Let us employ Darwin’s “universal acid” still further and see whether Darwinism itself dissolves. Darwin has here given us a picture of a thoroughly accidental world which nevertheless preserves the traces of

59. D. J. DEPEW - B. H. WEBER, *Darwinism Evolving: Systematics and Geneology of Natural Selection*, MIT Press, Cambridge 1996, 155.

60. The ascription of agency to natural selection is such a pervasive feature of the *Origin* that the instances defy enumeration.

61. Cf. GOULD - R. LEWONTIN, “The spandrels of San Marco and the panglossian paradigm: a critique of the adaptationist programme”, in *Proceedings of the Royal Society of London*, B 205, 1979, 589–590.

eighteenth century theodicy, providing (sometimes) subtle assurances that history remains perpetually on the upswing. Darwin thus takes frequent recourse to teleological language both to describe the relations of the “useful” parts of an organism to the whole of which it is a part and to describe the effects of natural selection “working for the good” of its beneficiaries. Thus despite viewing the organism as a cluster of contrivances, he nevertheless writes as if insects resembled their environment *for the sake of* their protection, for example, or as if we had eyes *in order to* see⁶². Darwin trades on the obvious, in other words, on the teleological wholes now disparagingly catalogued as the epiphenomenal holdings of “folk biology”. Aware of this, perhaps, he excuses himself on grounds that everyone understands what the real meaning of these conventions, implying that teleological forms can be translated into merely functional ones without loss.

In this case, however, eyes cannot be “for” seeing and certainly cannot develop in time with that end “in view” – especially if natural selection does not induce variability as Darwin insists. Rather eyes merely “happen” to function so as to see in a world that also happens, happily, to be illuminated, thus conferring an advantage on the seeing organism. Yet if we follow these ontological commitments through to their end, then even this is illusory. For in a world of mere functions or effects in which the external relation of part to part and the relation of biological insides to environmental outsides is merely accidental, the organism as a whole can no more have a *sake* than the individual part can, not least becomes the organism’s unity is identical with the coordinated interaction of parts itself.

Thus we begin to see that Darwinism is indeed a universal acid, dissolving itself along with everything else. For one cannot consistently hold to Darwinian principles without depriving Darwinism of its founding presupposition: organisms engaged in the struggle for life. If the denial of teleology ultimately entails the denial that the living organism has a “sake”, then its living too and the “interest” embodied in the very fact that it endeavors to continue doing so can be but happenstance, the

62. Again, the references are legion. Cf. DARWIN, *On the Origin of ...* cit., 33, 47, 59, 61, 117, 136, 154, 172.

epiphenomenal appearance thrown up by so many algorithmic functions operating on a world in which the organism itself and the distinction between living and non-living are, like every other distinction, finally and fundamentally meaningless.

The fact that one cannot really *be* a Darwinist does not stop people from trying, however. So a whole breed of genetic reductionists has arisen who obviate the problem and hasten the convertibility to function by making “the gene” (or genomic patterns statistically arrayed in populations) the real “unit of selection”, at the price of rendering the organism itself epiphenomenal and incidental to the real evolution occurring “behind its back,” and reducing the whole drama of “Darwinian evolution” to an illusion thrown up by the cold algorithms of biochemistry.

Now one might object that this is all too simple. It could be argued that Darwin himself was as much a romantic as a mechanist⁶³. One could point to the advent of systems biology, the epigenetic corrective to the one-sided emphasis of the code-script metaphor in genetics, and to the current movement to return the organism to the center of its own evolution as evidence that Darwinism is less reductionist in its essence than I have portrayed it here. Even Dawkins, whose genetic reductionism is the target of many of these developments, denies that any such “baby eating” reductionists really exist⁶⁴. One could add to this the rise of emergence theory in physics and other fields and so-called non-reductive materialism in some quarters of philosophy of science⁶⁵.

63. R. J. RICHARDS, *The Meaning of Evolution: The Morphological Construction and Ideological Reconstruction of Darwin's Theory*, University of Chicago Press, Chicago 1992; ID. *The Romantic Conception of Life: Science and Philosophy in the Age of Goethe*, University of Chicago Press, Chicago 2002, 514-554.

64. DAWKINS, *The Blind Watchmaker...* cit., 13. For opposition along the lines I've indicated, Cf. L. MOSS, “Darwinism, Dualism, and Biological Agency”, in V. HOSLE - C. ILLIES, *Darwinism and Philosophy*, Notre Dame Press, Notre Dame 2005, 345-379; MOSS, *What Genes Can't Do*, MIT Press, Cambridge 2004, esp. 44-50, 75-116. Cf. also E. NEUMANN-HELD, “The Gene is Dead – Long Live the Gene!”, in P. KOSLOSKI (ed.), *Sociobiology and Bioeconomics: The Theory of Evolution in Biological and Economic Theory*, Springer, Berlin 1999, 105-137 and G. WEBSTER - B. C. GOODWIN, “The Origin of Species: A Structuralist Approach”, in NEUMANN-HELD - C. REHMANN-SUTTER (eds.), *Genes in Development: Re-Reading the Molecular Paradigm*, Duke UP, Durham 2006, 99-134.

65. R. B. LAUGHLIN, *A Different Universe: Reinventing Physics from the Bottom Down*, Basic Books, New York 2005.

I am not claiming, however, that Darwinian biology *simply* denies that there is “more” to organisms than the coordinated interaction of externally related mechanical parts. To the contrary, I have insisted that while nature admits of mechanical analysis and while this has indeed “worked”, our elementary experience of reality is so much richer than this analysis that it is strictly impossible to think, believe, act, and *live* as if mechanical reductionism were true, which is perhaps why a culture intent on this impossibility is slowly but surely killing itself. Even Dawkins acknowledges seeing his daughter and not an assemblage of genes in the girl standing before him, and there is no catalog of “bridge laws” connecting lower and higher level phenomena that could ever add up to what he knows when he sees her. Because the infinite truth, goodness, and beauty internal to created being imposes itself on thought even in our attempts to deny it, this objective ‘more’ everywhere manifests itself. Rather what I wish to claim is that modern science in general and Darwinian biology in particular remain saddled with an inherently reductive ontology that forces them to deny the reality they cannot but affirm. Enacting a form of abstraction that itself embodies this ontology, it thus becomes impossible for these sciences to give a principled account of this “more” equal to our encounter with it in the experience of a world of unique meaningful wholes, much less a world of persons. Either experience itself is regarded as non-evidentiary and thus ultimately unreal, in a reprise of the old dualism of primary and secondary qualities, or the explanation of its intelligibility and unity is endlessly deferred on the assumption that its explanation can ultimately be reduced to a more thorough enumeration of the parts and their interconnections. (Hence the contemporary fascination with computers as models for consciousness.) Both Aristotle and Aquinas understood the folly of abstracting parts from an actual integrally related whole in order to treat the whole as the sum of its parts⁶⁶. Such abstractions “work”, so far as it goes, but they never arrive again at the whole from which they began.

66. Thomas noted this and made space for a legitimate form of abstraction when he correlated Aristotle’s distinction between understanding and judgment to the two *poles* of the real distinction. It is surely possible to study form in abstraction from its matter or to isolate parts from their wholes in experiments without losing sight of the priority

Darwinism is thus left with two options that dismiss (and thereby achieve mastery over) this “more”, sometimes in the very act of trying to account for it. Each is fatal not just to the organism itself who, lacking the unity and interiority of *esse* and *essentia* alike, is no longer the irreducible and incomprehensible subject of its own being and life but also to Darwinism itself to the extent it is serious about being true. Taking the *donum* of being as mere *datum*, dispensing with formal and final causes, and conflating ontological and chronological causal dependence, Darwinian biology is forced by its mechanistic assumptions to see the whole as arising simply out of the parts as in the process of manufacture, or perhaps more subtly but ultimately no less reductively, out of the parts’ epigenetic manifestation. There *is* of course an important sense in which the whole is dependent upon the interaction of the parts comprising it for its being and well being. Yet insofar as the organism is an *unum per se*, which is to say insofar as it transcends those parts as the principle of their coordinated interaction, the parts are always already dependent on the whole whose parts they are. Borrowing terminology from David L. Schindler, we might call this the asymmetrical dependence of wholes and parts, and it means that each organism is irreducible to, and more than the coordinated interaction of its parts, dependent though it is on the proper functioning of those parts for its flourishing. Precisely to this extent, the organism as an *unum per se* transcends and thus in an important sense is anterior to, that coordinated interaction. Epigenetic manifestation and metabolic function, to note just two examples, do not simply *produce* the organism, integral though they are to its full actualization. Rather, they are achievements *of* the organism, which are possible because the organism is already a “this something” even in its incipient stages.

I wish to suggest that the doctrine of creation properly understood, far from being the simple *antithesis* of Darwinian biology, actually saves the appearances *for* Darwinism by securing its subject, actual organisms and their worlds, *against* Darwinism, by insisting on the more-than-appearance as the gift that grounds the truth of appearance. It does this not by positing creation as an alternative process in competition with

of the “single actuality” of the one concrete, existing order and without falling into the Cartesian illusions that abstraction itself is indifferent. AQUINAS, *In De Trin.*, V.3

natural processes for how this or that feature of the world came to be, but rather by insisting that creation, the interior and irreducible gift of *esse* simultaneously veiling and manifesting itself in the unity of *essentia*, is simply *what the world is*, and by insisting that this gift is the precondition for the very novelty, causal transactions and substantial identity upon which Darwinism itself depends. Creation performs this service by restoring to creatures the self-transcending unity and interiority evacuated in the mechanistic turn, but this means restoring to them an essential mystery – the mystery of be-ing – that cannot in principle be attained by way of addition or by the multiplication of bridge laws. Darwinism is presently confined to registering this mystery in negative terms either as what it has not yet mastered or as non-evidentiary, epiphenomenal, and ultimately unreal. Since, however, there is no justification for regarding the alleged primary qualities as more reliable than secondary, Darwinism itself is not immune to its own universal acid. As Stephen R.L. Clark says, if Darwinism is the *only* truth, then even it cannot be true⁶⁷.

The gift that is creation cannot simply be imposed upon Darwinian explanation without ceasing to be the gift that it is. The reception of it, then, by Darwinian biology, cannot simply take the form of acquiescence to theological authority or assent to hypotheses external to biology itself, hypotheses which would have the result, in any event, of converting the act of creation into yet another finite process in competition with natural processes. The *doctrine* of creation can no more be an alternative to immanent explanation than the *act* of creation can be an alternative to natural processes. To think otherwise is already to be lost in theological confusion, to have substituted some crude idol of our own making for the *esse ipsum subsistens* who is God himself. Rather, as the source of gratuitous being that is somehow not God, and as the source therefore of difference-in-unity as such, creation is the condition of possibility for every causal transaction whatsoever, for an analogous difference must obtain, effects must be irreducible to – more than – their causes, if there is to be causality at all⁶⁸.

67. Hence the century-old alliance between Darwinism and pragmatism, where the question of “truth” is peripheral.

68. Cf. AQUINAS, *In Sent.*, 2.1.1.4.

Creation, in other words, is the condition of possibility for anything being genuinely *new*, and this novelty is visible in, and indeed is, the irreducible goodness, beauty, and truth of every concrete act of existence. This power of making new, as Paul says in Romans, is already visible in and as the world, if only we had the eyes to see and the ears to hear it. And yet, since we cannot help but seeing and hearing it, we are “without excuse”. The truth of creation, therefore, has already been given to Darwinian biology in and with the giving of the world, but Darwinism is congenitally blinded by its constitutive animosity toward this gift. In order to accept it Darwinism must lay down its arms and relinquish its own theological ambitions, which are no less theological for being negative, and “come to its senses” in both the ordinary and Aristotelian senses of that phrase. Only thus can it recuperate a wonder adequate to the phenomena that it everywhere presupposes. Inherent in this wonder is a love designated by Augustine as *amor frui*, the love of enjoyment which first lets the other *be* for its own sake and thus contains within itself the recognition that it *has* a sake, that it is the mysterious subject of its own irreducible being. This is in contrast with the *amor uti* that loves only for use, desiring the other only as a means to ends of its own arbitrary devising, the peculiar *pathos* of mechanistic ontology and its conversion of nature into artifice. We are here brought once again to wonder as the primitive form of cognition in the order of being which is itself the fruit of *amor frui*. There is still hope that by coming thus to its senses, by losing its life so as to finally to discover life, Darwinian biology may at last accept the gift offered to it from the beginning, the gift which provides the conditions whereby even Darwinism, or at least some features of it, might be said to be true.

SOMMARI

Di fronte alla “darwinizzazione di ogni cosa”, l’articolo mette a tema il rapporto tra teologia e scienze, con lo scopo di mostrare che la teologia svolge un ruolo fondamentale nei confronti di esse. Le scienze presuppongono il tutto e sono costitutivamente in rapporto con la metafisica e la teologia, come si vede a proposito della biologia darwiniana, elaborata anch’essa su un presupposto teologico. La biologia, ponendo la selezio-

ne naturale come unico universale, nega il punto di partenza stesso del darwinismo, ovvero la negazione dell'esistenza degli universali. Inoltre, viene argomentato come sia impossibile essere veramente darwiniani, dal momento che il vivere, il pensare e l'agire dell'uomo contraddicono la logica darwiniana del riduzionismo meccanicistico. La teologia, pertanto, ha il compito di liberare le scienze affinché siano propriamente scienze: la dottrina della creazione, che non si pone come alternativa al darwinismo, permette invece di "salvare le apparenze" in favore della biologia darwiniana, assicurando gli organismi, i loro mondi e la vita reale.

In front of the "Darwinization of every thing", the article puts to theme of relation between theology and science, with the goal of showing that the theology carries out a fundamental role by comparison with these. The sciences presuppose that everything is fundamentally in relation with metaphysics and theology, as one sees by the way of Darwinian Biology, also it is elaborated on a theological presupposition. Biology, putting natural selection as the only universal, denies the starting point itself of Darwinism, or to be more precise the negation of the existence of universals. Furthermore, it is argued that it is impossible to be really Darwinians, from the moment that living, thinking and acting of man contradicts the logical Darwinian of the mechanical reductionism. Theology, therefore, has the job to liberate the sciences so that they are really sciences: the doctrine of creation, that it does not put itself as the alternative to Darwinism, assuring the organisms, their worlds and the real life.

Face à la "darwinisation de toute chose", l'article met en lumière le rapport entre la théologie et les sciences, dans le but de montrer que la théologie tient un rôle fondamental dans leurs confrontations. Les sciences présupposent le tout et sont constitutivement en rapport avec la métaphysique et la théologie, comme on peut le voir au sujet de la biologie darwinienne, également élaborée sur un présupposé théologique. La biologie, en posant la sélection naturelle comme unique universel, nie le point de départ même du darwinisme ou suit la négation de l'existence des universels. De plus, du moment où le vivre, le penser et l'agir de l'homme contredisent la logique du darwinisme selon la réductionnisme mécaniciste, il est impossible, à proprement parler, d'être vraiment darwiniens. Aussi, la théologie a le devoir de libérer les sciences

afin qu'elles vraiment des sciences: la doctrine de la création, qui ne se pose pas comme une alternative au darwinisme, permet au contraire de "sauver les apparences" en faveur de la biologie darwinienne, en assurant les organismes, leurs mondes et la vie réelle.

Frente a la darwinización de todo, el artículo toca la relación entre teología y ciencias, con el fin de mostrar que la teología juega un papel fundamental frente a aquellas. Las ciencias presuponen el todo y están en relación constitutiva con la metafísica y la teología. La biología darwiniana presupone un fondo teológico. La biología al aceptar la selección natural como único universal, niega el punto de partida mismo del darwinismo, es decir la negación de la existencia de universales. Además pone de manifiesto la imposibilidad de ser darwinista a fondo pues desde el vivir, pensar o actuar humano contradicen la lógica darwinista del reduccionismo mecánico. La teología tiene la tarea de liberar las ciencias para que sean propiamente ciencias: la doctrina de la creación que no se presenta como alternativa al darwinismo, logra salvar las apariencias a favor de la biología darwinista, asegurado a los organismos un mundo y una vida reales.

Diante da "darwinização de cada coisa", o artigo tematiza a relação entre teologia e ciências, com o propósito de mostrar que a teologia, em confronto com as ciências, desenvolve um papel fundamental. As ciências pressupõem o todo e são constitutivamente em relação com a metafísica e com a teologia, como se vê a propósito da biologia darwiniana, elaborada também essa sobre um pressuposto teológico. A biologia, colocando a seleção natural como único universal, nega o ponto de partida do próprio darwinismo, ou seja, a negação da existência dos universais. Além disso, vem argumentado como seja impossível ser verdadeiramente darwinianos, do momento que o viver, o pensar e o agir do homem contradizem a lógica darwiniana do reducionismo mecanicista. A teologia, portanto, tem a tarefa de liberar as ciências afim que sejam propriamente ciências: a doutrina da criação, que não se põe como alternativa ao darwinismo, permite, invés, "salvar as aparências" em favor da biologia darwiniana, assegurando os organismos, os seus mundos e a vida real.

The Body: Witness to Creation

ADAM G. COOPER *

The body, which expresses femininity “for” masculinity and, vice versa, masculinity “for” femininity, manifests the reciprocity and the communion of persons. It expresses it through gift as the fundamental characteristic of personal existence. This is the body: a witness to creation as a fundamental gift, and therefore a witness to Love as the source from which this same giving springs¹.

The original act of creation out of nothing is by definition an event without creaturely witness. Going by the Scriptures, no one but God was there at the dawn of time, when he first created the heavens and the earth. Besides him there was no witness at creation². The Lord’s question to Job stands forever as a claim to this effect: “Where were you when I laid the world’s foundation?” (*Job* 38, 4). And while the sacred author seems to mean this historically, the same is true metaphysically. The act by which something is brought into being out of nothing is not the kind of act that can be experienced or directly apprehended. It cannot even be imagined, for when we try to picture it, we inevitably think of “nothing-

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1. JOHN PAUL II, *Man and Woman He Created Them: A Theology of the Body*, trans. M. WALDSTEIN, Pauline Books, Boston 2006, 183 (catechesis 14.4).

2. C. WESTERMANN, *Creation*, trans. J. J. SCULLION, SPCK, London 1971, 114.

ness” as a kind of “something” from which the creature is drawn. That is, we tend to think of creation as another case of “becoming”, an error to which even the common yet imprecise expression “the gift of being” can easily give rise. It is not that being is not a gift. But in the special case of creation from nothing, the act of giving does not presuppose, but actually constitutes, the recipient³.

But if we cannot experience or imagine this metaphysical marvel, if there is no created witness *at* creation, we may nevertheless not be unjustified in proposing the human body as a kind of privileged witness *to* creation. For a start, the entire created order bears “traces” of the Trinity like so many footprints in the sand. By themselves, such traces are limited to showing only *that* someone has passed by, not *who* that someone is (*ST I*, 45, 7). Yet if the cosmos declares “the glory of God” (*Ps* 19, 1), if God’s eternal power and divinity can be known “from what has been made” (*Rom* 1, 20), if the universe is a real analogue of God, then how much more does the human body – which contains the whole universe in itself, which appears inexhaustibly mysterious in its nuptial structure and communal form, and which alone in all creation has been fashioned in the divine image – visibly manifest its invisible, transcendent foundation. And while no human witness was “there” when the universe first came to be, “creation” as we know refers also to a continual process. God not only was but remains the unique transcendent cause of all actual things, providentially sustaining them in existence by his immanent power, wisdom, and love.

The Fathers of the Church especially noted the way the human body, with all its vulnerabilities, contains in summary the wisdom and wonder of the entire universe. As Saint Augustine marveled,

Even in the body... even here what evidence we find of the goodness of God, of the providence of the mighty creator! How structurally apt it is to serve the rational soul: its erect posture, the upward orientation of the face, the extraordinary mobility of tongue and hands in speech and writing, the congruence and harmony of its parts, the beauty in their equality and

3. See E. GILSON, *The Elements of Christian Philosophy*, Doubleday, New York 1960, 192.

correspondence, so much so that one would be at a loss to say whether utility or beauty is the major consideration in their creation⁴.

Has Augustine in these musings lapsed into a quaint romanticism? Don't they reflect an antiquated anthropology? In fact, moderns too refer to "the wisdom of the body"⁵. These thoughts seem not out of keeping with the claim that the body qualifies all we know, inasmuch as it carries within itself "a certain typical structure" of the world⁶. Whence do we derive our notions of motion and causation, space and relation, proportion and harmony? Is it not from the human body, or rather, from our own bodily experience? Is there not, in those human faces that strike us as most beautiful and perfect, a certain mathematical equipoise, and in the precarious balance of the intelligent organic system, an anticipated embodiment of some unfathomable wisdom? And with wisdom we do have a witness to the original creation: «I was there when he set the heavens in place...» (*Prov* 8, 27). Wisdom, this world-immanent divine presence, this exuberant, erotic entity, was and remains somehow present and active at the liminal boundary between eternity and time, simultaneously intrinsic to God and to the world he has made. She, lady wisdom, the delectable spouse, implicitly manifest in the deepest yearnings of the human mind and body, knows the mystery of *creatio ex nihilo* from the inside, as it were.

Yet there is still another reason why we can speak of the body as a witness to creation. The ultimate meaning of the universe – the why and wherefore of its existence – is by no means evident to the empirical or philosophical sciences. Hans Jonas was surely right to propose the living human body as the essential "momento" and "canon" of all attempts to solve the mystery of being⁷. Yet as Hans Urs von Balthasar so forcefully

4. SAINT AUGUSTINE, *City of God* XXII, 24.

5. Ernest Starling, co-discoverer of hormones, chose the title 'The Wisdom of the Body' for his Harveian Oration of the Royal College of Physicians in 1923. Since then the phrase has cropped up numerous times in medical and scientific literature. See S. B. NULAND, *The Wisdom of the Body*, Chatto and Windus, London 1997.

6. M. MERLAU-PONTY, *Phenomenology of Perception*, trans. C. SMITH, Routledge, London 2002, 370.

7. H. JONAS, "Life, Death, and the Body in the Theory of Being", in ID., *The Phenomenon of Life: Toward a Philosophical Biology*, Evanston University Press, Evanston, Illinois

argued, both cosmological and anthropological interpretations of the Christian mystery fail to grapple adequately with the *logos* of the cross of Christ⁸. The lance that pierced Christ's side rent more than his heart. "It opened God, it passed to the very center of the Trinity"⁹. The cross alone, understood as the definitive defeat of sin, the radical redemption of the body, the decisive Trinitarian crisis of love on behalf of fallen creation, makes clear not only *that* the universe is a creation, but also what kind of creation and by what kind of God. The cross alone tells us that for a man "to be" means for him to be a creature, to be a 'person addressed', to exist by and for love. In Balthasar's words:

In the light of the sign of God who annihilated himself to become man and to die forsaken, it becomes possible to perceive why God came forth from himself and became the creator of the world; expressing his absolute being and revealing as unfathomable love his perfect freedom, which is not an absolute beyond being, but the height, the depths, the length and the breadth of being itself.¹⁰

If the body, then, is a faithful witness to creation, a necessary "canon" by which to measure the adequacy of ontology, it is because it is in some way related to the cross. To this claim I shall return later.

1. WHAT IS A WITNESS?

But in the meantime, what does it mean to be a witness? In the early church the word *martyrion* often designated a holy place, the shrine or reliquary of some saint or martyr¹¹. This usage reflects the etymology of the verb *martyrein* which derives from the word to remember or

2001, 7-36, at 19.

8. See H. U. VON BALTHASAR, *Love Alone: The Way of Revelation*, trans. A. DRU, Burns and Oates, London 1968.
9. P. CLAUDEL, *L'Épée et le Miroir*, Paris 1939, 256; quoted by H. DE LUBAC, *The Mystery of the Supernatural*, trans. R. SHEED, Herder and Herder, New York 1998, 225, fn 12.
10. BALTHASAR, *Love Alone...cit.*, 117.
11. H. STRATHMANN, "μάρτυς et al.", in G. KITTEL (ed.), *Theological Dictionary of the New Testament*, trans. G. W. BROMILEY [hereafter cited as TDNT], Eerdmans, Grand Rapids, MI 1967, vol. IV, 474-514, at 507.

bear in mind. «Hence μάρτυς was probably “one who remembers, who has knowledge of something by recollection, and who thus tells about it...”»¹². But to remember, for the ancients, signified more than a mental act. Remembrance is a physical, social, and liturgical act. It is performed by means of ritual, story, and song; by sacrifice and thanksgiving and invocation of the holy name. Through all these the boundaries of time and space are transcended, the events of the past re-constituted in the here and now. By remembering God and his mighty deeds the worshipping community inserts itself into their salvific efficacy. But this remembering of God itself depends crucially on God’s prior remembrance of his people and his unconditional promises made to them in love. Repeatedly Israel cries out in its songs, “O Lord, remember...!” What else are the advent of the Messiah and the realization of universal salvation in him but an act of divine *anamnesis* (Lk 1, 72)? God, by remembering, constitutes Israel and Church as ‘his people’, that is, as a perpetual witness to his elective grace and covenant fidelity.

Why is there such need for a renewed theology and practice of witness in our time? Pope Paul VI expressed it well in *Evangeli Nuntiandi* (§41): «Modern man listens more willingly to witnesses than to teachers, and if he does listen to teachers it is because they are witnesses». To be a witness is to join with the Apostles in intimate fellowship with Christ and so in becoming “eyewitnesses (ἐπόπται)¹³ of his majesty” (2 Pet 1, 16). To be a witness, then, is not to stand apart like a signpost, pointing to something else far removed. True enough, stones, planets, and stars can all serve as potent witnesses, often the more eloquent for their silence. And for purely juridical purposes, so it is often said, the more objective and “disinterested” the witness, the better. Can a camera or DNA molecule lie? But the witness God constitutes his people to be, the testimony he calls them to give, is not external to the relationship they have with him. Their identity as witness is a vital dimension of their inner relatedness to him. They become a witness by being blessed with a gift, entrusted with

12. STRATHMANN, *TDNT IV*... cit., 475.

13. A *hapax legomenon* in the NT, used «to designate those who have been initiated into the highest grade of the mysteries». W. F. ARNDT - F. W. GINGRICH (eds.), *A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, Chicago University Press, Chicago 1958², 305.

an endowment as precious as God's very self. Even the dependability of Jesus' self-testimony rested not simply on his miracles but on his filial intimacy with the Father (*Jn* 1, 18; 8, 14). Many saw the risen Lord, yet only by means of eucharistic encounter did they become credible eye-witnesses (*Lk* 24, 35). Nor did the primitive Church in giving witness simply recount "the bare facts" of salvation history. Rather it proclaimed their meaning in terms of divine judgement and salvation. Thus Stephen testified as someone "full of the Holy Spirit", someone to whom it had been given to gaze into heaven and see "the glory of God" (*Ac* 7, 55). It was this graced vision, more than the manner of his death, that made him the Church's first μάρτυς.¹⁴

2. THE BODY AS WITNESS

A witness has a memory to recall, an account to render, a story to tell. To speak of the human body as a witness is to imply that it too speaks. Its testimony, while always embedded "linguistically" within the immediacy of concrete physical experience, nevertheless evokes a transcendent horizon that surpasses its own spatial and historical limits.

But the story must begin in the physical and concrete. Biologically the body is a marvel, and in its organic economy there is a story to tell whose validity does not depend on the relative plausibility of any theory of "irreducible complexity" or intelligent design. Consider for example each body's uniqueness, its specific biogenetic singularity. In this we may see the irreducible and "eminent dignity" of the human person, "his incommunicable mode of existing"¹⁵. Consider the body's organic and sensitive functions, its anatomy and structure. In these it is possible to discern "rational indications" and "anticipatory signs" that bespeak the body's character as "expression and promise of the gift of self, in conformity with the wise plan of the Creator"¹⁶. Consider a person's physically-root-

14. STRATHMANN, *TDNT IV*...cit., 495.

15. L. MELINA, *Sharing in Christ's Virtues: For a Renewal of Moral Theology in Light of Veritatis Splendor*, trans. W. E. MAY, Catholic University of America Press, Washington D.C. 2001, 71.

16. JOHN PAUL II, *Veritatis Splendor* §48.

ed emotional and affective inclinations towards pleasure and community. In these we discover the beginnings of relational interiorization, an openness to experiences preparatory for ultimate happiness¹⁷. Consider also some of the basic features peculiar to human sexuality: the incongruity of male–female excitation curves; the absence of seasons of estrus; the superabundance of spermatozoa; the complex dialogic structure of emotion and desire. In these one may detect a call for free and intelligent synergy, a self-transcendent fecundity, an intention of eternity¹⁸.

The body is also a witness in that it brings us face to face with the problem of the world: it is all *there*¹⁹. Before I know anything, before I think or feel a single thing, I am a body. Just as the givenness of the world makes us ask, why something rather than nothing, so the givenness of my body makes me ask, why me and not no-me? The contingency of the human body, whether from the first or third person perspective, testifies to the mystery of human generation, which in turn speaks of two things: dependence of being and continuity of being. Dependence of being is both radical and necessary. “There was once when I was not”. My physical existence, both in the very first instance and in the early years of its development, depended on some other, to whose beneficence I unconsciously looked as my one and only good. Every human being is constituted in this origin-in-another, and has his beginning in this dependent filiality. I am what I am, and in many respects only discover myself as such, from my father and mother. I am the fruit of their love. From their

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17. «Pleasure is so essential to the human psyche that, from the very beginning, it must be present in order for the developing person to take root in the world and to have activities which relate him or her to it. In other words, persons come to interiorize their relations to things and other persons in so far as they them as sources of pleasure. Otherwise, such relations will be rejected as hostile realities.... [T]he capacity for happiness depends on the experience of pleasure and prepares itself through it». A. VERGOTE, “Pleasure, Desire, Happiness”, in ID., *In Search of a Philosophical Anthropology*, trans. M. S. MULDOON, Leuven University Press, Leuven 1996, 137-148, at 139-140.
18. See R. LUCAS, *Man Incarnate Spirit: A Philosophy of Man Compendium*, Circle Press, Torino 2005, 245-49; M.-D. PHILIPPE, *Retracing Reality: A Philosophical Inquiry*, T & T Clark, Edinburgh 1999, 49-61.
19. «The problem of the world, and, to begin with, that of one’s own body, consists in the fact that *it is all there*». MERLAU-PONTY, *Phenomenology of Perception...* cit., 230.

communion I receive myself. No one is his own cause, and our bodies – being flesh of another’s flesh – are living proof²⁰.

Continuity of being is similarly both radical and necessary. From my parents I inherit what John Paul II called a “somatic homogeneity”, that is, a common human nature that I am not free to disown²¹. Humans may be self-determining beings, architects of their own destiny and freedom, but that is because they are “determined” to be so: they cannot *not* will to be happy. We come into existence as beings of a certain kind, with an open-ended project in our hands. To be: that is to partake of the infinite. To be human: that is to partake of the finite.

This physical dependence on and natural continuity with our parents are aspects of man’s dramatic character: he is an enigma who only finds himself – discovers the key to his meaning – outside himself, in a relational drama²². Every child has his foundation of existence outside himself, in his father and mother. His life unfolds as a drama precisely in his having to make sense of himself as different from yet fundamentally related to them.

3. TWO OR THREE WITNESSES

Notice how these elements imply the dramatic character of the bodily witness, in keeping with the biblical requirement for a minimum of “two or three witnesses”. If the body speaks, it does so antiphonally, in harmony. Here we recall the catecheses of John Paul II’s in which the body, on account of its reciprocal sexual structure, is designated witness to creation, or more precisely, witness to creation as fundamental gift,

20. This helps explain why there is such a close relationship between the first and fourth commandments, the latter of which is the first command “with a promise” (*Eph* 6,2; cf. *1Tim* 5,4). As John Paul II explains, we are to honour our parents «because for you they are in a certain sense representatives of the Lord; they are the ones who gave you life, who introduced you to human existence in a particular family line, nation and culture. After God they are your first benefactors». JOHN PAUL II, *Letter to Families* §15.

21. *Id.*, *Man and Woman He Created Them: A Theology of the Body...* cit., 160–161.

22. A. SCOLA, *The Nuptial Mystery*, trans. M. K. BORRAS, Eerdmans, Grand Rapids, MI 2005, 388.

and therefore witness to divine Love²³. There is no such thing as a human body simply; every body is a person, and every person is male or female, reciprocally correlated one to the other²⁴. This is why we must speak of the nuptial and familial structure of bodily witness, or what Angelo Scola has called the “nuptial testimony”. Scola has argued that to understand the body’s witness, we must give an adequate account of its reciprocal duality and asymmetrical unity. Reflection upon the communal trajectory of the body’s sexual dynamism yields several key insights for our inquiry.

First, a person can only experience what it is to be human – to be creature and person and gift – as a person of one or the other sex. One cannot fulfill the totality of humanity by oneself, in isolation. One always has before oneself “the other way of being human, which is to [oneself] inaccessible”²⁵. My “I” depends on this other, yet this other remains irreducibly different, a mystery, pointing always to the mysteriousness of my own being. I cannot exhaust being human in myself; I need another who, on account of the sexual difference, remains at some level always unknown and mysterious to me.

Secondly, the reciprocal duality between man and woman is not symmetrical. This qualification rules out any androgynous vision of humanity as though man and woman were two halves seeking to make a single whole, as in the myth of Aristophanes in Plato’s *Symposium*²⁶. Rather the asymmetry of the man-woman dual unity

consists in the fact that sexual difference, in a significant and immediate way, testifies that the other always remains “other” for me. Sexual difference cannot be overcome or resolved, as by the coming together of two incomplete halves to make a single whole. Even the special unity which

23. JOHN PAUL II, *Man and Woman He Created Them: A Theology of the Body...* cit., 183 (catechesis 14.4).

24. Pastoral wisdom and sensitivity is called for in the application of these principles in biophysically anomalous circumstances.

25. SCOLA, *Nuptial Mystery...* cit., 7.

26. *Ibid.*, 8. In a later chapter (94, n37) Scola notes: «This androgynous mentality which is dominant nowadays is not the least reason for the spread of homosexuality and transsexuality and explains at the same time why these might be presented as legitimate sexual alternatives. Our judgement here is ontological, not ethical...».

comes about when male and female become one flesh in the marital act is always a dual unity: true unity always constitutively includes ineliminable difference. Even “in the ‘one flesh’ the ‘other’ remains ‘other’ for me...”²⁷.

In other words, the male–female reciprocity is asymmetrical not only because man and woman represent “otherness” and “difference” to one another, a difference that cannot be replicated by someone of the same sex (man cannot be for man what woman is to man, not can woman be to woman what man is to woman). Moreover, this difference is intrinsically ordered – as toward a kind of “space” – towards procreation. “Two beings are now only one, and it is when they are one that they become three”²⁸. That is, the dual unity of male–female is not self-enclosed (symmetrical), but open to a third (asymmetrical). Self-realization is ontologically impossible without bringing into play the essential fecundity of love. The real *communio* of the two depends crucially on this ontological asymmetry²⁹.

The third insight is that sexuality belongs to what it means to be created in the image of God. This affirmation not only guards us from the twin errors of defining humanity along purely spiritual or non-material lines, or of reducing sexuality and sexual difference to the level of the sub-human and animal. It allows us to discern in the man-woman relation – inasmuch as it consists of one, the other, and their union, or of difference, love, and fruitfulness – a certain analogy of the holy Trinity³⁰.

Fourthly, the man-woman relationship helps us arrive at a definition of love that holds true at every level. The longing for love cannot be erased from the human heart, and to say “love” with any kind of meaning is to imply sexual difference and fruitfulness. Thus the nuptial mystery is present in all forms and manifestations of love, human or divine³¹. Nuptial love is the paradigmatic principle and very epitome of love (*amoris per*

27. *Ibid.*, 95. This is why homosexual “unions” are not in fact unifying: the “other” is not “an-other” at all: he is in a sense another me, my mirror and not my complement, and therefore cannot reveal to me – as a true “other” could – the mystery of my being.

28. M. BLONDEL, *Action (1893)*, trans. O. BLANCHETTE, University of Notre Dame Press, Notre Dame 2003, 245.

29. SCOLA, *Nuptial Mystery... cit.*, 95–96.

30. *Ibid.*, 9.

31. *Ibid.*, 393.

excellentiā imago perfecta)³². In this critical fact the sexual body bears in itself an inner witness to the created – loved! – foundation of the entire order of being.

4. PROCREATION

In this light we can appreciate more fully the witness of the body with respect to the human vocation to co-create with God, or what John Paul II has called “the generative meaning of the body”. In marital betrothal, man and woman stand together before the creative power of God. God is the creative source of every new being, but he is present in human fatherhood and motherhood “quite differently than he is present in all other instances of begetting”, for inscribed in the biology of generation is the genealogy of the person³³. In a privileged way, human begetting “is the continuation of Creation”³⁴.

Once again we may turn to Saint Augustine for an affirmation of this vital connection between human procreation and the creative power of God, both in the original production of man and woman and in the ongoing propagation of the human species. Like his contemporaries, Augustine was irked by the way man reproduces in kinship with non-rational animals: “he breeds like the beasts”. For him, as for the Fathers in general, a certain shame attaches to even pious human copulation³⁵. Yet Augustine ranks the power of procreation first among God’s continued blessings to fallen humanity. Had God removed this blessing, “his creatures could not make progress, to attain their prescribed development and complete their span of life”. This power is “inherent” and “interwoven in human bodies”. Included with the power of propagation is the power of conformation, by which there is maintained continuity of species. The

32. BENEDICT XVI, *Deus Caritas Est* §2. See also SCOLA, *Nuptial Mystery*... cit., 9; W. E. MAY, “Love Between Man and Woman: The Epitome of Love”, in L. MELINA – C. A. ANDERSON (eds.), *The Way of Love: Reflections on Pope Benedict XVI’s Encyclical Deus Caritas Est*, Ignatius Press, San Francisco 2006, 66-79.

33. JOHN PAUL II, *Letter to Families* §9.

34. ID., *Letter to Families* §9.

35. SAINT AUGUSTINE, *City of God* XIV, 12-24. See A. G. COOPER, “Marriage and ‘The Garments of Skin’ in Irenaeus and the Greek Fathers”, *Communio* 33 (2006) 215-237.

actuation of these powers in the generation of a child “is a work of such wonder and grandeur as to astound the mind that seriously considers it, and to evoke praise to the creator”³⁶.

More recent theological developments provide perhaps an even richer account of the relation between creation and procreation. According to the well-known medieval dictum, the greatest perfection beings can attain consists in the communication of their perfection to another, “to diffuse their own goodness among others as far as is possible” (*ST I*, 19,2). If we understand creation as “God’s generous donation of being”³⁷ by which he lovingly gives every being to itself, then all created beings possess this “basic generosity of existence”, to use Maritain’s famous phrase. As Adrian Walker explains, all created substances are constituted by a double movement: God’s liberal bestowal of *esse* (the act of being) and their own act of letting themselves ongoingly receive their being as gift. This is why it is true for all creatures that to be is to love in the form of a gift³⁸. Moreover, this metaphysical substructure binds all creatures together within “a vast web of causality, understood as the mutual giving and receiving of being within the all-pervasive divine creative act”. Nothing is excluded from this community. «Each thing, in receiving itself from God according to the “logic” of gift, at that very moment disposes itself as an ontological “place” in which other things can receive *them*-selves from God...»³⁹. Yet human beings in particular, by virtue of their “special immediacy to God”⁴⁰, are able to become conscious of this donatic self-constitution and so freely and intelligently to realize this capacity for ecstatic and fecundic self-communication.

We can see this in sacred history in the way the primordial plan of God to create a being in his image – and thereby to communicate his own goodness in an especially privileged and weighty form – is fulfilled not simply by the creation of both male and female, but by their immediately being ordered towards a similar act of self-communication: «Be

36. SAINT AUGUSTINE, *City of God* XXII, 24.

37. A. J. WALKER, “Personal Singularity and the *Communio Personarum*”, *Communio* 31 (2004) 457-480, at 466.

38. *Ibid.*, 472-473.

39. *Ibid.*, 473-474.

40. *Ibid.*, 476.

fruitful and multiply...» (*Gen* 1,28). Other animals also are commanded to “be fruitful and multiply” (*Gen* 1,22). But in the case of man and woman the command is given as direct personal address: «And God said to them...». The mandate presupposes the free personal co-operation on the part of the man and woman in the commanded activity. In fact it presupposes two levels of inter-relation, first, between man and woman, and second, between humanity and God, who always remains the transcendently immanent causal power of existence. Eve knows this when she declares: «With the help of the Lord I have brought forth a man» (*Gen* 4,1). In short, the transmission of life for human beings is not to take place as an instinctive animal function, but as a freely negotiated project, a grateful acceptance of a vocation, entered into through the “mysterious exchange”⁴¹ of interpersonal dialogue and mutual consent.

By means of this dynamic the meaning of the biblical terms “image” and “likeness” are further elucidated. The initial sounding of the plan to make man in God’s *tselem* (the more concrete term) and *demuth* (the more abstract) is in the first instance expanded upon in the text in terms of a certain kind of co-dominion or co-governance with God over the earthly kingdom (*Gen* 1,26). The language is evidently royal. After their creation, the “imaging” is expanded upon in terms of fruitfulness (co-creation with God: be fruitful and multiply) and governance (co-rulership with God: fill the earth and subdue it). Again the language is royal. For humans to be in the image of God therefore is for them to act as God’s mediatorial vice-regents (cf. *Ps* 8,5-8). The announcement that creation is “very good” (*Gen* 1,31) and therefore complete (*Gen* 2,1) is only uttered after the ordering of the man-woman couple to co-creation and co-dominion with God, an ordering which constitutes the sixth and final day of creation, penultimate to eternal Sabbath.

Two further observations in this connection are relevant. The first concerns the extension of the nuptial asymmetry spoken of earlier into the sphere of procreation. While the procreative act belongs to neither husband or wife in particular, but to both as a single “one flesh” plural-personal subject (without their respective subsistences collapsing into a single hypostasis), each makes a distinct and unique gift of self which the

41. BLONDEL, *Action...* cit., 245.

other, precisely as “other”, can only receive in the spirit of “letting be” (*Verlassenheit*)⁴². Respecting their bodily differences, it is obvious that the complementary self-giving of husband and wife takes distinct forms. In May’s oft-cited formula, he gives “in a giving sort of way”, she gives “in a receiving sort of way”⁴³. Most noticeably, it is in her body that the new human being will be conceived and its early life begin. «The *mother*, even before giving birth, *does not only give shape to the child’s body, but also, in an indirect way, to the child’s whole personality*»⁴⁴. In the foundational months of its personal formation, the child seems distanced from the father, or at least related to him only by the physical mediation of the mother. There are a number of ways of taking this. If we accept the notion that the father represents the transcendent principle, and the mother the immanent principle, then the relational triad constituted by procreation has an intrinsic order and differentiation somewhat analogous to the way in which all humans creatures are related to the creator only through their physical embeddedness in the earth. God has appointed human beings to receive their life maternally and immanently, “from the ground” as it were (*Gen* 2,7), while paternity more directly derives its form and meaning from the divine Father (*Eph* 3,15). For unlike maternity, which is realized in a very tangible way inside the woman’s body (enstatically), paternity is realized outside the body (ecstatically). There is also something suggestive here of the way the divine persons distinguish themselves in the economies of creation and redemption, which are a kind of “echo of the love within God”⁴⁵. On the one hand, God is not divided in his acts; like procreation for a couple, creation is the “we” act of the “entire” Trinity

42. Although we rightly refer to the “we” of the spouses (*Letter to Families* §11), the announcement “we are pregnant” commonly made by couples signals a well-meaning but erroneous flight from the particular. It is the woman, not her husband, who conceives and becomes pregnant (by him).

43. MAY, “Marriage and the Complementarity of Male and Female”, *Anthropotes* 8/2 (1992) 41-60.

44. JOHN PAUL II, *Letter to Families* §16. How profoundly a person is affected by the conditions of his or her embryonic matrix is a matter of interest not only for theologians and psychologists. Recent genetic research suggests that certain determinative aspects of genetic identity and function are not set in concrete at syngamy but depend on the normal unfolding conditions of the maternal environment.

45. VON BALTHASAR, *Theologic: Theological Logical Theory*, vol. 2: *Truth of God*, trans. A. J. WALKER, Ignatius Press, San Francisco 2004, 140.

(*ST I*, 45,6). On the other hand, Scripture makes vital distinctions: God creates by his “word” and “breath” (*Ps* 33,6; cf. *Jn* 1,3); all things come “from” one God, the Father, and “through” and “for” one Lord, Jesus Christ (1 *Cor* 8, 6; cf. *Col* 1, 16). In other words, creation is rooted in the order proper to the intra-trinitarian processions (*ST I*, 45,6). Without at this moment addressing the question of maternity or femininity in God, there is a sense in which the Word and the Spirit are modes of God’s *ad extra* immanence in creation. Which is to say that God’s creative activity, including the aspects of difference and participation and imaging implied by creation, is internal to his being⁴⁶.

The second observation is that, in a way analogous to *creatio continuans*, procreation calls for the raising of children in a benevolent, life-affirming culture in which they may mature and flourish. By the manner in which they shape their posterity, both father and mother play a critical role in the unfolding of creation towards its proper *telos*. As Blondel perceived in a remarkable passage:

[The child] is the indelible sign of what was willed by reason in love with unity and eternity, in concert with the sincere passion that wants only to be exclusive and perpetual.... And as the child has within himself the infinite power of development which he holds from those for whom he is the first fulfillment, he remains for them the permanent means, by the education they give him, of moving on to their destiny. Toward the child they have an unlimited duty, and indefeasible responsibility, an indestructible bond, since it is a matter of forming his reason and of realizing in him, unto infinity, what is best in them. It is still themselves whom they raise in raising him above themselves, for they are both superior and subordinate to the child over whom they have authority, but to whom they themselves are duty bound. Indeed, he receives from them what he must perfect in himself and it is to him as to their end that they relate their own perfecting of self⁴⁷.

46. See D. C. SCHINDLER, “What’s the Difference? On the Metaphysics of Participation in a Christian Context”, in *The Saint Anselm Journal* 3/1 (2005), 1-27. This point was urged long ago, albeit in more simple form, by Saint Athanasius against the Arians. See K. ANATOLIUS, *Athanasius: the coherence of his thought*, Routledge, London 1998, 116-125.

47. BLONDEL, *Action* ... cit., 246-247.

5. THE WITNESS OF MORTALITY

When we think of creation we quite naturally think of the “beginning” of things. «In the beginning, God created...» (*Gen* 1, 1). For the ancients, however, “beginning” is always related to “end”. The two are reciprocally illuminating. This is why it seems necessary also to explore the question of death and its relation to our physicality and creatureliness. Death is not an ultimate end for human beings, but it is an end. Philosophers argue over whether or not death can be experienced. But even if not, we can at least anticipate it, whether through our own sufferings, mortifications, and weaknesses, or through the deaths of others, especially of those we love. If love gives us eyes, then in the death of the beloved, says Pieper, the lover «is accorded an experience which comes as close as humanly possible to the dying person’s experience of his own death» (Pieper 1969: 21). While the lover does not himself die yet, he can know and feel in some sense the real nature of death. By the same token, the absence of love, or the refusal of empathy, implies the impossibility of experiencing one’s own death. To miss this experience is to miss a profound insight into one’s own personal reality, and can only undermine the possibility of owning one’s death and actively accepting its testimony.

The language we use about death sheds light on its meaning for us. We use euphemisms to avoid its reality: she’s gone, left us, departed, passed away, gone home, fallen asleep (though some of these can possess a profound theological sense). These terms imply some kind of transition. Then there are stronger terms: he was lost, or lost his life; he was killed or taken; he lost his battle, or finally succumbed. These terms imply some end or terminus, some kind of return to the *nihil* of the beginning. Indeed, before the later affirmation that the human soul, once created, is indestructible, many of the Fathers taught that “nothingness” remains permanently bound to human nature on account of its created origins. Unless positively contravened by a gratuitous immortal force, there is always this legacy in us that tends towards non-being, or at least towards a gravely diminished form of existence⁴⁸.

48. See, for example, ATHANASIUS, *On the Incarnation* 4-5.

But does death belong to the definition of what it means to be human, in the way that life belongs to it? Is death a positive feature of human existence, or is it somehow a negation or interruption of our proper fulfillment? If it belongs to our natural appetite to know the truth and to love the good, and if being alive is prerequisite for such operations, then it would seem that death is unnatural, that it is not built into us “by nature”, that it arises as an alien force, a potential threat to the fulfillment of our fundamental desires and inclinations. It is not only as animals that we strive to survive and naturally avoid death. Death threatens our “spiritual” and rational aspirations as well.

Our conclusions here depend largely on what one means by “death”. Physical death seems built into the fabric of the mutable universe: it takes its place within the constant cycle of generation, growth, and dissolution inherent to all living beings. But with the death that entered the world through sin (*Rom* 5,12) we are dealing with a different reality. This is the power, hostile to creation, to which humanity has been subject from time immemorial, under the sign of physical death. This is the oppressive boundary that closes sin-bound human life upon itself, like a stifling, suffocating shroud (*Is* 25,7). Only when this shroud is lifted, when death, that great swallower, has itself been swallowed up by death – a victory which requires nothing less than the decisive and definitive removal of the world’s sin – can physical death be relieved of its threatening spectre, its signification as divine judgement and human doom. Only thus, with death delivered of its sting and reconfigured as an open door, not a barrier, to the fulfillment of our deepest longings, can it be embraced and actively accepted. Understood in this way, death and its ascetic anticipation can have a salutary and sapiential effect on the orientation of our will and affections. For if in death we are forced to surrender every temporal and physical good that we have hitherto cherished and desired, we are finally faced with what lies beyond death as our one and only concrete, eternal, good. Krapiec comments:

At the end of life, God can stand before the human spirit in order to show it that concrete and real good that, encoded, and appearing only under the evershifting veil of the changeable world, appeared to the human being’s spirit during its journey through life.... [E]verything has pointed precisely to this good, which has influenced us through the succession of goods that

do not satisfy the infinite desire of a human being. [That is why] human desire is divided until the moment of death. Then, in the highest moment of human life, God will stand before the human spirit as a concrete good and at the same time as the infinite good which, as analogously general good, as happiness in general, was constantly disturbing the human will. God, realizing concreteness and infinity, can actually appear before the human spirit only in the moment of the nonreversible finale of changeable human life⁴⁹.

Such an understanding of death helps explain the inadequacy of the idea that death is simply the separation of soul and body. This model, though valid within certain limits, understands death passively «as the occurring dissolution in a man of his material elements, a dissolution over which we can have no control or power»⁵⁰. Such a death “happens” to a man, but it cannot be experienced freely and actively, that is, as a human act. Such a death reduces me, a person, to a decomposing material object, and makes death an event of anti-creation. How different is the death of Jesus, the foundation of the new creation. For at the moment of his death, Saint John writes that he “gave up his spirit”, or better, “handed over [παρέδωκεν] his Spirit” (*Jn* 19,30), suggesting an active, Pentecostal donation of his innermost possession: the Spirit who creates humanity and the earth anew (*Ps* 104,30).

What seems most important is to affirm that it is the human being who dies, not the body or the soul; that while after death the subsisting soul cannot properly be called a person, and exists in an unnatural state, death does not interrupt personal identity, since self-cognition is not a (purely) material act; that death can be accepted positively, actively, and freely by those who recognize it as the means of union with one’s final Good, the personal completion of one’s earthly activity; that because the actual perfection of the person cannot be realized except in the soul’s conjunction with the body, therefore the soul’s indestructibility implies the eventual resurrection of the body; and thus, the final overcoming of

49. A. KRAPIEC, *I-Man: An Outline of Philosophical Anthropology*, abridged by F. J. LESCOE – R. B. DUNCAN, Mariel Publications, New Britain, CT 1985, 180-181.

50. KRAPIEC, *I-Man*... cit., 184.

death, its transformation from an alien, threatening power into an open door to our perfection, lies not in our power, but in the hands of God.

This is more or less the kind of understanding we find in one of the earliest known witnesses to the doctrine of *creatio ex nihilo*. In it, the themes of bodily death, martyrdom, and creation are bound together in the last utterance of a mother to her dying son:

I know not how you came into my womb, neither was it I who bestowed on you your spirit and your life, and it was not I who brought into order the first elements of you or your brothers. Therefore may the Creator of the world, who fashioned the generation of man and devised the generation of all things, in mercy give back to you again both your spirit and your life.... I beseech you: lift up your eyes to the heavens and the earth, see all that is in them, and so recognize that God them made not of things that were, and that the race of men also came into being this way. Fear not this butcher, but accept your death, that in the mercy of God I may receive you back again with your brothers (2 Macc 7,22-29).

For the Christian, it is in holy baptism that this path of re-creation through death is begun. Summarising the teaching of Maximus the Confessor who may be taken as representative on this point, I once wrote elsewhere:

The very dramatic details of the rite – immersion in water and re-emergence from its drowning depths – already mark out on the physical body of the candidate the precise pattern (τύπον) of entombment and resurrection, each of which corresponds to a particular stage in the overall divine economy and whose final archetype is otherworldly⁵¹.

In the sacramental death and rebirth of the body, by which it partakes in the threefold witness of the Spirit, the water, and the blood (1 Jn 5,7-8), the human person comes to bear “in himself” (1 Jn 5,10) God’s own testimony to creation in its deified state. To the extent that the body is a kind of dynamic, mnemonic register of all past experience (Marcel),

51. COOPER, *The Body in Saint Maximus the Confessor: Holy Flesh, Wholly Deified*, Oxford University Press, Oxford 2005, 243.

then by baptism it is constituted the privileged place of witness to creation's future in the nuptial feast of the Lamb and the Bride.

6. THE CROSS AND CREATION

With these comments, we fittingly conclude by turning to the relationship between the body and the cross. Citing Balthasar, I remarked earlier that the Cross alone provides the *logos* to the entire created order, its why and wherefore in trinitarian love. Hugo Rahner has traced the deep significance of the cross for the early Christian psyche. In the crucifixion of the Lord of glory the Church has always discerned the wisdom of God and so the mystery of all creation: «it embraces everything that has happened or will happen in the world»⁵². The cross is a “new mystery”, but its form and pattern run as deep as creation itself: Golgotha is “the centre of the universe”⁵³. Irenaeus' meditation on the cosmic “mark of the cross” is profound, yet typical:

The true creator of the world is the Logos of God who is our Lord and who in these latter days became man. Although he is in the world, his power invisible embraces all things, and his mark has been set upon the whole of creation since he is the Word of God, who guides and orders all things. And that is why he came in visible form to that which was his own and became flesh and hung upon the wood, that he might recapitulate the universe in himself (AH 5, 18, 3).

This means, then, that wherever the sign of the cross is traced, there the hidden meaning of all creation is witnessed to and disclosed. We encounter this variously in the *sphragis* of baptism and trinitarian invocation, the outstretched physical posture of prayer, the tree of Paradise, the eucharistic species, saintly mortification, in fact wherever true kenotic love is to be found.

52. H. RAHNER, *Greek Myths and Christian Mystery*, trans. B. BATTERSHAW, Burns and Oates, London 1963, 47.

53. RAHNER, *Greek Myths...* cit, 51.

Yet the cross is meaningless apart from the body which hung on it. There were countless crucifixions in the ancient world. Only one constitutes God's universal salvific dynamism at work in and for all creation. The scandal of the cross lies not just in its brutality, but above all in its particularity. The blood and water which spewed from the heart of Christ tells us that the new creation presupposes and springs from the old. The cross is not the negation of time and tradition, culture and creation, but their redemption, renewal and restoration. With the rending of Jesus' flesh came the symbolic rending of the curtain in the Temple (*Mk* 15,38; cf. *Heb* 10,20); in his crucified body, any "dividing wall of hostility" (*Eph* 2,14) between Jew and Gentile, God and humanity, male and female, heaven and earth, the eternal and temporal, has been done away with once for all. What Saint Maximus credits to the Incarnation in general may be applied especially to the work of the cross: "natures are instituted afresh"⁵⁴. In Jesus' body taken, blessed, broken and given, we discover creation as it is truly intended to be – unified, deified, glorious – a *telos* hidden for now under the humble veil of the human and historical. In the eucharistic sacrifice of Golgotha, the crucified and now risen body of the Lord Jesus Christ was established as the privileged, perpetual, and proleptic witness to creation's true nature, origin, and goal: a gift, from love, for love.

SOMMARI

L'atto originario della creazione dal nulla è, per definizione, un evento senza testimoni. Tuttavia, anche se non esiste alcun testimone creato della creazione, il corpo umano può essere inteso come testimone della creazione. Il corpo parla della propria sorgente trascendente e come maschio e femmina ne parla nella forma della reciprocità e dell'armonia. A motivo della sua struttura sessuale e di reciprocità, Giovanni Paolo II ha indicato il corpo come testimone della creazione o, più precisamente, come testimone della creazione in quanto dono fondamentale e, di conseguenza, testimone dell'Amore divino. Niente è semplice come il corpo umano;

54. SAINT MAXIMUS THE CONFESSOR, *Ambiguum* 41 (PG 91, 1304D - 1316A).

ogni corpo è una persona e ogni persona è maschio o femmina, tra loro in relazione reciproca. Questa è la ragione per cui si parla di struttura nuziale e familiare della testimonianza corporea, o, con le parole di Angelo Scola, di “testimone nuziale”. Scola ha affermato che per capire la testimonianza del corpo è necessario offrire una descrizione adeguata della sua prospettiva comunionale. In questo modo si è condotti alla *kenosi* di Cristo sulla croce, dove la creazione viene scoperta nel suo senso proprio: data, unificata, deificata, gloriosa. Nel sacrificio eucaristico del Golgota, il corpo crocifisso e risorto di Cristo è diventato il testimone privilegiato ed eterno della vera natura, origine e fine della creazione: un dono dell’amore per l’amore.

The original act of creation from nothing is, by definition, an event without witnesses. Nonetheless, even if there does not exist one created witness of creation, the human body can be understood as witness to creation. The body speaks of one’s own transcendental source and as male and female it speaks of this in the form of reciprocity and of harmony. To the motive of the sexual structure and of reciprocity, John Paul II had indicated the body as witness of creation or, more precisely, as witness of creation in as much as fundamental gift and, as a consequence, witness of divine Love. Nothing is as simple as the human body; every body is a person and every person is male or female, between them in reciprocal relation. This is the reason for which one speaks of the nuptial and family structure of the corporal testimony, or, with the words of Angelo Scola, of the “nuptial witness”. Scola affirmed that to understand the testimony of the body it is necessary to offer an adequate description of the communal prospective. In this way it is led to the kenosis of Christ on the Cross, where creation is discovered in its own sense: given, unified, deified, and glorious. In the Eucharistic sacrifice of Golgotha, the crucified and resurrected body of Christ became the privileged and eternal witness of real nature, the origin and end of creation: a gift of love for love.

L’acte originaire de la création *ex nihilo*, est, par définition, un événement sans témoins. Toutefois, même s’il existe aucun témoin créé de la création, le corps humain peut être entendu comme témoin de la création. Le corps parle de la propre source transcendante et comme homme et femme en parle sous la forme de la réciprocité et de l’harmonie. A cause de sa structure sexuelle et de la réciprocité, Jean-Paul II a indiqué

le corps comme témoin de la création ou, plus précisément, comme témoin de la création en tant que don fondamental, et par conséquent, témoin de l'Amour divin. Rien n'est aussi simple que le corps humain; tout corps est une personne et toute personne est masculin ou féminin, en relation réciproque entre eux. C'est la raison pour laquelle on parle de structure nuptiale et familiale du témoignage corporel, ou, avec les mots de Angelo Scola, de "témoin nuptial". Scola a affirmé que pour comprendre le témoignage du corps, il est nécessaire d'offrir une description adéquate de sa perspective de communion. De la sorte, nous sommes conduits à la kénose du Christ sur la croix, où la création est découverte en son sens propre: donnée, unifiée, déifiée, glorieuse. Dans le sacrifice eucharistique du Golgotha, le corps crucifié et ressuscité du Christ est devenu le témoin privilégié et éternel de la vraie nature, origine et fin de la création: un don de l'amour pour l'amour.

El acto originario de la creación es, por definición, un evento sin testigos. Pero se puede entender el cuerpo humano como testimonio de la creación, el cuerpo habla de la fuente trascendente. Como varón y mujer habla en forma de reciprocidad y armonía. Juan Pablo II habla de ello a propósito de la estructura sexual recíproca y señala el cuerpo como testimonio de la creación, en cuanto don fundamental y por ello testimonio del amor divino. Nada más simple que el cuerpo humano todo ser humano es persona y toda persona varón o mujer. Por ello se habla de estructura nupcial o familiar al referirse al cuerpo o, en palabras de Scola, de testimonio nupcial. El teólogo afirma que para entender el testimonio del cuerpo es necesaria una descripción adecuada de su perspectiva de comunión. De este modo se llega a la kenosis de Cristo en la cruz. Donde se descubre la creación es todo su sentido: dada, unificada, glorificada y gloriosa. En el sacrificio eucarístico del Gólgota, el cuerpo crucificado y resucitado de Cristo se convierte en testimonio privilegiado y eterno de la verdadera naturaleza, origen y fin de la creación, un don del amor y para el amor.

O ato original da criação do nada é, por definição, um evento sem testemunhas. Todavia, ainda se não existe alguma testemunha do criado da criação, o corpo humano pode ser entendido como testemunha da criação. O corpo fala da própria fonte transcendente e como macho e fêmea ele fala na forma da reciprocidade e da harmonia. João Paulo II

indicou o corpo como testemunha da criação ou, mais precisamente, como testemunha da criação enquanto dom fundamental e, de consequência, testemunha do Amor divino. Nada é simples como o corpo humano; cada corpo é uma pessoa e cada pessoa é macho ou fêmea, entre eles em relação recíproca. Esta é a razão pela qual se fala de estrutura nupcial e familiar do testemunho corpóreo, ou, com as palavras de Angelo Scola. De “testemunha nupcial”. Scola afirmou que para entender o testemunho do corpo é necessário oferecer uma descrição adequada da sua prospectiva de comunhão. Deste modo se é conduzida a kenosi de Cristo na Cruz, onde a criação vem descoberta no seu sentido próprio: dada, unificada, deificada, gloriosa. No sacrifício eucarístico do Gólgota, o corpo crucificado e ressuscitado de Cristo tornou-se o testemunho privilegiado e eterno da verdadeira natureza, origem e fim da criação: um dom do amor por amor.

Naturalizing Naturalism and Materialism's Ghosts

CONOR CUNNINGHAM *

To us, men of the West, a very strange thing happened at the turn of this century; without noticing it, we lost science, or at least the thing that had been called by that name for the last four centuries. What we now have in place of it is something different, radically different, and we don't know what it is.

Simone Weil¹

Materialism is really our established Church.

G. K. Chesterton, 1922²

There is a sense in which materialism is the religion of our time.

John Searle, 1995³

In this article we first, introduce the concept of naturalism and the main consequences that arise from this philosophical position, then we turn to

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1. S. WEIL, *On Science, Necessity and the Love of God*, trans. R. REES, Oxford University Press, Oxford 1968, 3.
2. G. K. CHESTERTON, *Eugenics and Other Evils: An Argument Against the Scientifically Organized State*, M. W. PERRY (ed.), Inkling Books, Seattle, WA 2000, 77.
3. J. SEARLE, *Mind: A Brief Introduction*, Oxford University Press, New York 2004, 48.

analysis, however briefly, science's relation with religion and the doctrine of creation, followed by an examination of the practice of science itself, before returning to offer a sustained critique of both materialism and ontological naturalism.

1. NATURALISM, AT FIRST BLUSH...

Generally speaking, there are two main types naturalism: methodological and ontological. The former is the approach that science must take when it engages with the universe insofar as it will fail to make any progress unless it brackets the divine. The latter holds that bracketing the divine is not merely methodologically necessary but constitutive of reality as such. A certain methodological naturalism is commonsensical. It would not be very helpful when making a cup of tea if, when the kettle boiled, we became overly entranced by the mystical wonder of the emission of steam, thinking it was the communication of the spirits of our ancestors. Science must preclude this, and thus it seeks to explain phenomena in purely natural terms. This is eminently sensible – we may expect the farmer to pray to his maker, asking for a good harvest, but we don't then expect the farmer to put his feet up and leave God to get on with ploughing the fields⁴. In contrast with methodological naturalism, ontological naturalism goes further. While methodological naturalism issues no philosophical or metaphysical opinion on what exists, ontological naturalism suffers no such shyness. It tells us not only that science must stick to what we take to be natural but that the natural is all there is, indeed all there ever could be – though as shall be argued they have no well-principled definition of “nature”, rather it is but a placeholder that helps accommodate an ideology. Moreover, ontological naturalism deposes philosophy's ancient position as the final arbiter of our under-

4. Sir Arthur Eddington gives an interesting example of this way of thinking: «A business man may believe that the hand of Providence is behind all the vicissitudes of his life; but he would be aghast at the suggestion that Providence should be entered as an asset in his balance sheet. I think it is not irreligion but a tidiness of mind, which rebels against the idea of permeating scientific research with a religious implication», (A. S. EDDINGTON, *Science and the Unseen World*, Quaker Books, London 2007, 16).

standing of existence to which even science is subjected (what is called First Philosophy). Instead, philosophy now becomes the handmaiden of science, at the most, or science's lackey boy, at the least. Thus for Wilfred Sellars, «Science is the measure of all things»⁵. This is what is commonly known as scientism, the perspective of which Richard Lewontin captures in one pithy sentence: «Science is the only begetter of truth»⁶. Leaving aside the fact that this proposition is extra-scientific – that is, it is a philosophical thesis and not a scientific one at all – we might be inclined to enquire as to why he asserts something so question-begging? Well, Lewontin gives us an answer of sorts:

We take the side of science in spite of the patent absurdity of some of its constructs, in spite of its failures to fulfill many of its extravagant promises... in spite of the tolerance of the scientific community for unsubstantiated just-so stories, because we have a prior commitment to materialism.... Moreover that materialism is absolute, for we cannot allow a Divine foot in the door⁷.

There is a saying that offers sage advice: *the theology that marries the science of today will be the widow of tomorrow*. It is good and constructive for theology to engage with science but it cannot act as its “foundation”, so to speak. But this also applies to atheism: *the atheism that marries the science of today will be the widow of tomorrow*. Even Richard Dawkins admits as much in relation to evolution:

Darwin may have been triumphant at the end of the twentieth century, but we must acknowledge the possibility that new facts may come to light which will force our successors of the twenty-first century to abandon Darwinism or modify it beyond recognition⁸.

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5. See “Empiricism and the Philosophy of Mind”, reprinted in W. SELLARS, *Science, Perception and Reality*, Routledge, Keegan & Paul, London 1963, 173.
 6. R. C. LEWONTIN, “Billions and Billions of Demons”, in *New York Review of Books* 44/1 (January 9th, 1997) 28-32 here at 31, Review of *The Demon-Haunted World: Science as a Candle in the Dark*, by C. SAGAN.
 7. *Ibid.*, 31.
 8. R. DAWKINS, *A Devil's Chaplain: Selected Essays by Richard Dawkins*, Weidenfeld and Nicholson, London 2003, 1.

But if that is the case, then it is wholly illegitimate for Dawkins to use of a highly selective and inherently provisional interpretation of Darwinism as a vehicle for his own brand of atheism.

When it comes to human nature and culture, scientism and ontological naturalism would or should contend that we are guilty of what John Ruskin called the “pathetic fallacy”. This fallacy is committed when we attribute emotions to what quite obviously cannot have “emotion” – as in “the wind cried” or “the trees wept”. We are guilty of this because we keep insisting that *we* have such emotions. We keep attributing terms such as life, death, existence, desire, free will, pain, and so on, to ourselves. But for ontological naturalism – or, better, *restrictive naturalism* – this simply cannot be the case because the very entities to which we ascribe such terms do not exist. Rather, we are left in a world that consists solely in the physical or the material. Consequently, what we see before our eyes is merely the agitation of matter; now thus, now so⁹. And that remains the case whether such agitation is that of murder, rape, cancer, war, famine, love or joy, birth or death. Moreover, we have to ask if “matter” is all there is, how do we even discern real difference if all events and objects – all change – seem to be wholly arbitrary? To account for real difference, surely we must appeal to something other than matter – yet any such appeal is prohibited in what amounts to a monistic philosophy (the notion that existence is composed of only one type of substance, which we call “matter”). As John Peterson puts it, «If matter is the ultimate substrate and is identified with some actual thing, then all differences within matter must come from something besides matter»¹⁰. Consequently, the materialist must admit that his description is metaphysical; it tacitly invokes something that transcends what is basic at the level of immanence, or the merely physical. The only other option is to deny all change, just as they must, it seems, deny objects themselves. As Peter van Inwagen writes,

9. On the idea of restrictive naturalism, see B. STROUD, “The Charm of Naturalism”, in M. DE CARO - D. MACARTHUR (eds.), *Naturalism in Question*, Harvard University Press, Cambridge, MA 2004, 21-35.

10. J. PETERSON, “The Dilemma of Materialism”, in *International Philosophical Quarterly* 39/156 (December 1999) 429-437, at 430.

One of the tasks that confronts the materialist is this: they have to find a home for the referents of the terms of ordinary speech within a world that is entirely material – or else deny the existence of those referents altogether¹¹.

Again: «there is no such thing as a thing»¹². And this includes persons, for as David Chalmers says, «you can't have your materialist cake and eat your consciousness too»¹³. But of course, Hegel had already pointed to the vacuous nature of materialism, arguing that the word “matter” remains an ideal unless you pick out *something* material and that something cannot be just mere matter. But materialism would appear to preclude identity. And this becomes clearer when we realize that ontological naturalism cannot, on its own terms, identify what are called *persistence conditions* for an object – that which an object requires to be what it is (see below)¹⁴. It is little wonder, then, that Michel Henry tells us «there is no person in science»¹⁵ (again see below).

As we know, those that celebrate scientism and ontological (restrictive) naturalism do so because what they have set out to achieve is the banishment of the divine, no matter what the cost. These fundamentalist atheists will bring the whole house down so as to leave no room for God. They are, in short, *willing to cut off their faces to spite their noses* – willing to leave us all faceless. This being the case, prisons become a cultural artifact, and an eccentric, unjustified one at that. Moreover, and shockingly, we all become Holocaust deniers. For we find it impossible to provide a metaphysics that can notice real difference. Consequently, all wounds become impossible – cancer is removed from the dictionary and is no longer to be eradicated – for this is a radicalized democracy, the very flatlining of reality. All such notions now only appear in folktales. We are, therefore, now beyond good and evil, as Nietzsche foresaw. And if this is true, then

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11. P. VAN INWAGEN, *Ontology, Identity, and Modality: Essays in Metaphysics*, Cambridge University Press, Cambridge 2001, 60.
 12. CHESTERTON, *Orthodoxy*, Fontana, London 1961, 59.
 13. D. J. CHALMERS, *The Conscious Mind*, Oxford University Press, Oxford 1996, 168.
 14. See M. C. REA, *World Without Design: The Ontological Consequences of Naturalism*, Clarendon Press, Oxford 2002. This is an excellent work.
 15. M. HENRY, *I am The Truth: Toward a Philosophy of Christianity*, trans. S. EMANUEL, Stanford University Press, Stanford, CA 2003, 262.

naturalism, rather than occupying the high ground of the enlightened, is in truth more damaging than all the wars, diseases, famines, disasters and crimes put together. For it is the liquidation of existence itself. It is not Heaven that is under threat but Earth, the common sense world, the world of nature and of the natural. This is the abolition of the human – not God¹⁶. On this point Simone Weil makes a crucial observation, quoting first from Adolph Hitler's *Mein Kampf*, which contends that in the natural world "force reigns everywhere and supreme over weakness which it either compels to serve it docilely or else crushes out of existence". According to Weil,

these lines [from *Mein Kampf*] express in faultless fashion the only conclusion that can reasonably be drawn from the conception of the world contained in our science.... Who can reproach [Hitler] for having put into practice what he thought he recognized to be the truth? Those who, having in themselves the foundations of the same belief, haven't embraced it consciously and haven't translated it into acts, have only escaped being criminals thanks to want of a certain sort of courage which he possesses¹⁷.

We must, of course, remember that naturalism recognizes science only. The point (to which we shall return below) is that science should not seek to operate on its own (when it does it is called scientific naturalism, or scientism, as we heard already), for if it does then Hitler's position and approach does indeed become a live-option. But such egregious acts or thoughts do not define science, in other words, science does not belong to naturalism, metaphysically speaking. Indeed, in a certain sense it belongs to religion.

2. INTERLUDE: RELIGION'S CHILD

A theology which is concerned to emphasize the destiny of mankind and the meaning of history cannot avoid facing the world in which men actually live out their

16. See C. S. LEWIS, *The Abolition of Man*, Harper and Collins, New York 1974.

17. WEIL, *The Need for Roots*, trans. A. WILLS, Routledge & Keegan Paul, London 1952, 129-130.

lives.... Theology today must remain open to embrace both humanity and the cosmos; it must take into account both the aspirations of all mankind and the results of science technology

Fr Dumitru Staniloae¹⁸

There is nothing God does not wish to be investigated and understood by reason
Tertullian

I have never found a better expression than the expression "religious" for this trust in the rational nature of reality and of its peculiar accessibility to the human mind. Where this trust is lacking science degenerates into an uninspired procedure.

Albert Einstein¹⁹

According to the spin-doctors of the religion vs. science myth, religion impeded the development of science, resisting both its practice and development, instead relying on and advocating reactionary superstition based on the pronouncements of blind, irrational faith²⁰. Selecting just one of the many flies from this ointment, it should be pointed out that science as we know it in the West is very much a child of religion. Religion may not have been its only parent, but its parentage is indisputable, and incontrovertible. In fact, the only suspicion of cuckoldry – of those left to bring up another's child, thinking it to be their own – is that of secularism. In short, science is not the child of secularism, if by 'secular' we mean non-religious. And it cannot be for many reasons, but let's just take two. First, the secular is not an atheistic accomplishment but is itself a child, another progeny, of religion. Second, historically speaking, science, as it is understood in Western culture, emerged from the soil and womb of monotheism. *Homo sapiens* are intrinsically religious, but it would not help the cause of science – or rather, we would never bother inventing science – if our religion was not monotheistic²¹. Think of it this way: many religions divinize the world, especially polytheistic ones. Ac-

18. Fr. D. STANILOAE, *Theology and the Church*, trans. R. BARRINGER, St. Vladimir's Seminary Press, Crestwood, NY 1980, 224–226

19. A. EINSTEIN, *Lettres à Maurice Solovine*, Gauthier-Villars, Paris 1956, 102–103.

20. See C. CUNNINGHAM, *Evolution: Darwin's Pious Idea*, Wm. B Eerdmans, Grand Rapids, MI 2010, Chapter Six.

21. See *Ibid.*, Chapter Five.

ording to these religions the world is full of gods, spirits, magic, demons, and so on. Now, what would be the point in getting out of the bed in the morning to go to the laboratory if, by lunchtime, the shifting sands of a divinized world had gone and changed everything? In other words, speaking about reality and nature as a whole, polytheism would not have had any reason to trust in the regularity of the world, for any such regularity was beholden to the fiat and whim of countless deities. The world of Pagan religions was one molded more by capricious deities than by immoveable laws. It would simply not have dawned on those that inhabited such a world to develop science²². We can put the reason for this somewhat differently: for the Pagan, the polytheistic world is necessary, a given, which means the idea of an identifiable world separable from the divine would not have been forthcoming. Yes, there are creation myths in many such religions. But the nature of those myths has at most a very restricted, atrophic notion of creation. First, any such “creation” is more a matter of formation, for it always involves pre-existent materials. Second, that which has now been formed (what we see around us) remains beholden to that which formed it. Indeed, the world was very much the stage of the deities that had formed it. It remained theirs. And just as with the Pagans, atheism on its own (or at least atheism that had not arisen from within a monotheistic culture) would likewise never have even thought about the possibility of science. Why would it? For in that case the world again would be necessary, it would just be – so why would we even think that, within its patterns, forms, structures, and so on, there would be something amenable to the probing questions of intelligence? And again, the very idea of ‘the world’ would be impossible, for the articulation of any such concept requires the notion of edges, so to speak. But if the world is just there, then how would we even think of it as a whole? In other words, how would we, in the absence of religion, ever stumble upon the idea of there being a “world”?

22. Of course Pagan philosophers such as Plato and Aristotle were indeed central to the development of science, but only insofar as their philosophy was so amenable to monotheism.

By contrast, the miracle or revolution that monotheism is, arising from its doctrine of creation means that science is possible and that it is, moreover, possible to think of “a” world²³. As Cardinal Schönborn says,

Only that belief that the world is created, that it is not divine, that it is finite, that it is “contingent”, as we say in philosophical terminology, not “necessary” – that it might equally well not have existed – has made it possible for the world and everything that is in it to be studied for its own sake²⁴.

Here then is the irony: monotheistic religion allowed for the first time in history a “secular” world, one that could be studied and that could be seen to exhibit law-like behaviour. As Hart puts it, «The world was in one sense demystified, even as it was imbued with another kind of sacramental splendor»²⁵. In other words, the world was not God, for it was created, and in this way it was secular. Moreover, it was finite, which meant that we could in a sense get our minds around it²⁶. But this did not imply atheism, as it were, for the world remained sacramental – the fruit of divine generosity. As Whitehead noted,

In the first place, there can be no living science unless there is a widespread instinctive conviction in the existence of an “Order Of Things”. And, in particular, of an “Order Of Nature”.... The inexpugnable belief that every detailed occurrence can be correlated with its antecedents in a perfectly definite manner... must come from the medieval insistence on

23. As both Stephen Gaukroger and Stanley Jaki have argued, convincingly, we might add, is that science did not emerge from out of a separation from religion or in opposition to it but was itself the progeny of religion. See S. GAUKROGER, *The Emergence of a Scientific Culture: Science and the Shaping of Modernity 1210-1685*, Clarendon Press, Oxford 2006; and S. L. JAKI, *The Savior of Science*, Scottish Academic Press, Edinburgh 1990. Also see, R. HOYKAS, *Religion and the Rise of Modern Science*, Regent College Publishing, Vancouver 2000.

24. CH. SCHÖNBORN, *Chance or Purpose?: Creation, Evolution and a Rational Faith*, Ignatius Press, San Francisco, CA 2007, 20.

25. D. B. HART, *Atheist Delusions: The Christian Revolution and Its Fashionable Enemies*, Yale University Press, New Haven, CT 2009, 229-230.

26. On the importance of the idea that creation played in the formation of science, see E. KLAAREN, *Religious Origins and Modern Science: Belief in Creation in Seventeenth-Century Thought*, Wm. B. Eerdmans, Grand Rapids, MI 1977.

the rationality of God.... My explanation is that the faith in the possibility of science, generated antecedently to the development of modern scientific theory, is an unconscious derivative from medieval theology²⁷.

The important point is that creation meant that the world was contingent, thus making experiments and empirical research crucial, since one could not just deduce the truth of the world by way of abstract logic. In addition, the Creator of this world was traditionally thought to be wise, loving, intelligent and so on – and thus not capricious or deceptive. This being the case, there was great reason to study the visible world, trusting in its law likeness. Moreover, as Creation is a command and not a making or a forming from pre-existent elements, there is no recalcitrant material, meaning there is nothing in the world that is beyond the worth of examination and exploration²⁸. As C. S. Lewis says,

Unless all that we take to be knowledge is an illusion, we must hold that in thinking we are not reading rationality into an irrational universe but responding to a rationality with which the universe has always been saturated²⁹.

In Jeremiah (33:25) the nature of creation in relation to its creator is expressed in very clear terms, when God declares his fidelity to Israel in these terms: «When I have no covenant with day and night, and have given no laws to heaven and earth, then too will I reject the descendants of Jacob and of my servant David». The personal relationship of God to Man, and the relation of God to nature, is clearly delineated, indeed separated (though of course there is an analogical similarity). Sir Arthur Eddington picks up on this delineation when commenting on another biblical passage:

27. A. NORTH WHITEHEAD, *Science and the Modern World*, The Free Press, New York 1927, 18-19. Also see, B. A. WALLACE, *The Taboo of Subjectivity: Towards a New Science of Consciousness*, Oxford University Press, New York 2000, 41.

28. See E. McMULLIN, "Introduction: Evolution and Creation", in E. McMULLIN (ed.), *Evolution and Creation*, University of Notre Dame Press, Notre Dame, IN 1985, 8.

29. LEWIS, *Christian Reflections*, Wm. B. Eerdmans, Grand Rapids, MI 1967, 65.

And behold the Lord passed by, and a great and strong wind rent the mountains, and brake the pieces in pieces the rocks before the Lord; but the Lord was not in the wind: and after the wind an earthquake; but the Lord was not in the earthquake: and after the earthquake a fire; but the Lord was not in the fire: and after the fire a still small voice.... And behold there came a voice unto him, and said, What does thou here, Elijah?

Eddington says:

Wind, earthquake, fire-meteorology, seismology, physics – pass in review, as we have been reviewing the natural forces of evolution; the Lord was not in them. Afterwards, a stirring, an awakening in the organ of the brain, a voice which asks, What does thou there?³⁰.

The notion of contingency brings another important point to the fore. Because the world is contingent, because it is “for nothing” – and, as Eagleton rightly notes, this puts the new atheists and the theologians in the same boat, or at least the same harbor – then Creation is indeed bereft of a reason³¹. While it might appear counterintuitive to some, the point is that Creation would not have come into existence if it was for a reason. Why? Because if Creation had come into existence for a reason, then it would not be wholly different from God. It would rather be something constrained by a divine necessity – something God “needed”. And of course if Creation were not wholly different from God, then God would quite plainly not be God. According to orthodox Christianity, however, creation is a gift, not a given. And if it were not a gift it would be wholly uninteresting and, as said, beyond notice, like an object that is so close to our eyes that we are unable to see it because we cannot cognise its sides.

30. EDDINGTON, *Science and the Unseen World...* cit., 17.

31. See EAGLETON, *Reason, Faith and Revolution...* cit., 10; Also see J. C. LENNOX, *God's Undertaker: Has Science Buried God?*, Lion, Oxford 2007, 62.

3. SCIENCE NO MORE: SCIENCE ONCE AGAIN

Mythologized science is today the opium for the metaphysical enervation of the masses.

Christoph Yannaras³²

Much as religious fundamentalism presents only an idealized caricature of the history of its own beliefs, so does scientism present the history of science as an unswerving march toward Truth.

B. Allan Wallace³³

Returning to our main argument, as mentioned above, the most significant progeny of restrictive naturalism, namely, scientism is a massive intellectual pathology being peddled in the West. The philosopher of science Bas van Fraassen calls it the genuflection toward science³⁴. It is very evident in the work of the new atheists, wherein they introduce to the public a ridiculous interpretation of science, elevating it to the status of First Philosophy. Scientism seeks to assert a division between hard, scientific facts and woolly folk-tales, most apparent in religions. The reading public are asked to ‘grow up’ and leave childish things (the folk-tales of religion) behind, to instead embrace the adult world revealed by the natural sciences with their strong principle of verification – if you can’t spray it, it don’t exist³⁵. We will see below just how unscientific this notion of verification is. For the moment, we note just how serious this pathology is. We do this by borrowing some words of Dawkins, but changing a couple of them.

It is fashionable to wax apocalyptic about the threat to humanity posed by the AIDS virus, “mad cow” disease, and many others, but I think the case can be made that *scientism* is one of the world’s greatest evils, comparable

32. C. YANNARAS, *Elements of Faith: An Introduction to Orthodox Theology*, T & T Clark, Edinburgh 1988, 38.

33. WALLACE, *The Taboo of Subjectivity...* cit., 38.

34. B. C. VAN FRAASSEN, *The Empirical Stance*, E. CASSIRER (ed.), Yale University Press, New Haven, CT 2002, 11.

35. This we believe is to paraphrase Ian Hacking.

to the smallpox virus but harder to eradicate. *Scientism*, being a belief that isn't based on evidence, is the principle vice of any militant atheism³⁶.

We are of course substituting the word “scientism” for “religion”. Now, such scientism appears to have been accommodated by an alteration in our intellectual consciousness. And this change is duly noted by the then-Cardinal Joseph Ratzinger: «The separation of physics from metaphysics achieved by Christian thinking is being steadily cancelled. Everything is to become “physics” again»³⁷. This unfortunate turn, to say the least, can be seen in the words attributed to Ernest Rutherford, “There is only physics, all else is stamp collecting”. One major consequence of this is that science as a discipline becomes less rational, more reductive, and so more nihilistic, undermining itself in the process. For as Gergorios argues, «Divorced from love and wisdom, science/technology becomes an enemy of humanity»³⁸. More than that, it becomes the root of all evil, for what greater evil can there be than the denial of evil, just as it becomes the denial of people (see below). When society gives people or institutions special privilege, there is generally a proportionate increase in the level of responsibility. And this is needs to be the case with science, for when it is left to its own devices – or becomes devoid of any constitutive relation to other disciplines and other modes of discourse – then science becomes contorted. It is then transformed into an ideology that we have referred to as scientism. Indeed, there is something very particular, even special, about science's methodology. And because of that uniqueness, and the unique dangers that go with it, precautions must be appropriate. And what is that special status? Quite simply, science is allocated a mandate to explore, examine and analyse the world in a wholly objective fashion. Indeed, it is allowed to look at the world as if it were dead. As Bulgakov says, «Science deliberately commits a murder

36. Quoted in A. McGRATH, *Dawkins' God: Genes, Memes, and the Meaning of Life*, Blackwell Publishing, Oxford 2005, 84; of course Dawkins has the word “faith” were we have put “scientism”.

37. J. RATZINGER, *Truth and Tolerance: Christian Belief and World Religions* Ignatius Press, San Francisco, CA 2004, 178.

38. P. MAR GERGORIOS, *Science for Sane Societies*, Paragon House, New York 1987, 75.

of the world and of nature, it studies nature's corpse»³⁹. This may sound frightening, but it is not necessarily so. Take the example of a surgeon who renders a patient unconscious, as if they are dead or bereft of mind, but does so only to perform a life-saving procedure. But one would be more than perturbed if, when the patient regained consciousness, the surgeon then only treated them 'as if' they were alive (something which the restrictive naturalist does). Put another way, science becomes dangerous when the irreality of its methods (by irreality we mean abstractness) is mistaken for reality. If the as-if-dead methodology becomes an ontology, in other words, then the "as if" is forgotten. And when this happens, science has forgotten itself. It has forgotten that it is scientists as humans who make science, and not the other way around. Again, to quote van Fraassen, «A theory can at best replace real life by a phantasm, even if it is of particularly useful and survival-adaptive sort»⁴⁰. So even if a theory appears to be as real as soil, so to speak – an impression arising from its utility and applicability – we must not forget that its reality is borrowed and that, as with all things borrowed, it will at some point have to be given back. And this stands for all scientific theories. Take the example of matter: surely physics can tell us what it is. But no, for, as McGinn (among many others) points out, «physics does not tell us the intrinsic nature of matter, only its operationally definable aspects»⁴¹ (see below). Now, any such methodological forgetting of life is fine and very necessary. But science must not abuse the very generosity of its own possibility by mistaking itself for ontology. In other words, it must not be removed from its home, which is the subject. Yes, it may look out its front door and analyse what lies before it, but it must also always remember the home that lies behind it, its own soil. After all, do not all scientists return home at the end of the day? Science is practiced at the cost of ignoring its very possibility, and it is only when the human situation interrupts the well greased rails of all such movement that what is actually occurring

39. S. BULGAKOV, *Philosophy of Economy: The World as Household*, trans. C. EVTUHOV, Yale University Press, New Haven, CT 2000, 183.

40. VAN FRAASSEN, *The Empirical Stance...* cit., 178.

41. C. MCGINN, "Hard Questions", in G. STRAWSON et. al., *Consciousness and Its Place in Nature: Does Physicalism Entail Panpsychism?*, A. FREEMAN (ed.), Imprint Academic, Exeter 2006, 90.

is brought back into focus. One thinks of the situation that many found themselves in during the reign of the Nazis – the mechanic, say, who mended vans, concentrating (as if looking down a microscope) at the task in hand, never thinking to look up and see the wider picture. For of course his labours were in collaboration with the Nazi project, enabling the continued transportation of the Jews to their death. It is little wonder that the death camps were named *concentration* camps. According to van Fraassen, if we appeal only to the scientific worldview, as if it were the final account of reality, then there is no place for ourselves, not to mention those who practice science itself⁴². We shall return to the question of the status, nature and methods of science below. First, let us look briefly at the question of facts vs. fictions, or the supposed verificationism of science versus the supposedly ungrounded speculations of religion and, indeed, philosophy.

4. VERIFICATION OR CHECKING THE PULSE

Theories come and theories go. The frog remains.

Jean Rostand⁴³

As a consequence of his ontological naturalism, Richard Dawkins has what Terry Eagleton calls

an old-fashioned scientific notion of what constitutes evidence. Life for Dawkins would seem to divide neatly down the middle between things you can prove beyond doubt and blind faith. He fails to see that all the most interesting stuff goes on in neither of these places⁴⁴.

And this includes science itself, because if science were required to meet such an inappropriate and old-fashioned ideal of verification, then it would be out of a job. Moreover, to see religion as a sort of failed sci-

42. See VAN FRAASSEN, *The Empirical Stance...* cit., 189

43. Quoted in P. K. STANFORD, *Exceeding our Grasp: Science, History, and the Problem of Unconceived Alternatives*, Oxford University Press, Oxford 2006, 3.

44. EAGLETON, *Reason, Faith and Revolution...* cit., 7.

entific attempt to explain the world is, according to Eagleton, «like seeing ballet as a botched attempt to run for the bus»⁴⁵. Indeed, Dawkins on theology is like someone «who lays claim to the title of literary criticism by commenting that there are some nice bits in the novel, and some scary bits as well, and it all very sad at the end»⁴⁶. Now, the verificationism that Dawkins seems to advocate is probably best represented by William Clifford (1845-1879), the arche proponent of evidentialism, who famously warns us: «It is wrong always, everywhere, and for everyone, to believe anything upon insufficient evidence». The problem with this standard, of course, is that if it were adhered to, then scientific materialists would have given up the ghost long ago, renouncing their adherence to a dogma⁴⁷. And much of science would be out too, for as van Fraassen rightly notes, «After all, much of science isn't verifiable.... Our science faces the tribunal of experience as a whole and is forever underdetermined by the deliverances of experience»⁴⁸. The vulgar veneration of verificationism is quite absurd. G. K. Chesterton captures the quandary well:

Bowling down in blind credulity, as is my custom, before mere authority and the tradition of the elders, superstitiously swallowing a story I could not test at the time by experiment or private judgment, I am firmly of the opinion that I was born on the 29th of May, 1874, on Camden Hill, Kensington⁴⁹.

And of course, the same could be said for death, one's own death, that is. Can it ever be verified? Moreover, do not Dawkins' own writings breach his own elected principles, for as Kagan points out,

Richard Dawkins, who writes with the hubris of a Medieval archbishop, insists that the only beliefs deserving of loyalty are those that correspond

45. *Ibid.*, 50.

46. *Ibid.*, 53.

47. Quoted in W. JAMES, *The Will to Believe and Other Essays in Popular Philosophy*, Harvard University Press, Cambridge, MA 1979, 18.

48. VAN FRAASSEN, *The Empirical Stance...* cit., 12. See also, L. LAUDAN, "Demystifying Underdetermination", in M. CURD - J. A. COVER (eds.), *Philosophy of Science: The Central Issues*, W. W. Norton & Co., New York 1998, 320-353.

49. CHESTERTON, *The Autobiography of G. K. Chesterton*, Ignatius Press, San Francisco, CA 2006, 21.

to empirically validated. All other ideas, and especially belief in God, are dangerous, irrational illusions. Because Dawkins should have known that there was no evidence to support the belief that his writings would persuade deeply religious persons to change their minds, his decision to spend time composing books on this theme violated the imperative he was advocating⁵⁰.

Polanyi points out that

God cannot be observed; any more that truth or beauty can be observed. He exists in the sense that He is to be worshipped and obeyed, but not otherwise; not as a fact – any more than truth, beauty, or justice exists as facts. All these, like God, are things which can be apprehended only in serving them⁵¹.

Is Dawkins going to tell us that mathematics, morality, justice, the good, and beauty – even the human mind and human person (see below) – do not exist because he cannot stick his fingers in them? More to the point, he cannot stick his fingers in the theory of evolution either. But unlike Dawkins and indeed creationists who read *Genesis* as if it were a proto-scientific text, thus they too are guilty of scientism, we do not for a minute think that this affects the validity of, say, evolutionary theory. An eminent example of such crass misunderstanding is provided by Christopher Hitchens, whose tongue is apparently nowhere near his cheek: «thanks to the telescope and the microscope [religion] no longer offers an explanation of anything important»⁵². It would be hard to construct a more mistaken and misleading sentence, at least without an amazing amount of concerted effort. Eagleton compares the above passage to saying that, because of the electric toaster, we can forget about Chekhov. But even more than that, if such vulgar methodology were to be actu-

50. J. KAGAN, *The Three Cultures: Natural Sciences, Social Sciences, and the Humanities in the 21st Century*, Cambridge University Press, New York 2009, 83. We would like to thank Professor Kagan for sending us a copy of the proofs for this text.

51. M. POLANYI, *Personal Knowledge: Towards a post-critical philosophy*, Routledge & Kegan, London 1958, 279.

52. C. HITCHENS, *God is Not Great: How Religion Poisons Everything*, Atlantic, London 2007., 282.

ally embraced, a world profoundly close to nothingness will be left in its wake. Again, it would be the Earth, not the Heavens that would perish. Horst makes a similar point when he comments that

mass-market books like E. O. Wilson's *Consilience* (1998) or Francis Crick's *The Astonishing Hypothesis* (1993), it is hard to escape the impression that the authors have not read any philosophy of science written since the 1960s⁵³.

And we could of course add Dawkins' *The God Delusion* to Horst's list. As Eagleton points out,

If the Virgin Mary were to put in an appearance at this very moment in the skies over New Haven, clutching the baby Jesus with one hand and nonchalantly distributing banknotes with the other, it would be more than the reputation of anyone laboring away in the Yale laboratories was worth to poke his or her head even fractionally out the window⁵⁴.

Interestingly this quote is reminiscent of that moment in *Acts* (1.11), wherein Christ is "lifted into Heaven". Two angels then turn up and chastise the onlookers: "Ye men of Galilee, why stand ye gazing up into heaven?" The point being that if they could look up and see Christ ascending, so to speak, he quite precisely would not be, as he would in fact just be a matter of feet above you, most likely lower than passing birds, and certainly today lower than any plane! In other words, verification just does not fit the bill, as it were, nor solve the problem. In fact, verification would be precisely its opposite. And before the advocate of restrictive naturalism objects that we are begging the question, here is a quote from the eminent philosopher of mind, John Searle, who was asked if he believed in anything supernatural:

None. But you see, there's something else that is, in a way, more important in this issue of the supernatural. Intellectuals in our culture have become

53. S. HORST, *Beyond Reduction: Philosophy of Mind and Post-Reductionist Philosophy of Science*, Oxford University Press, Oxford 2007, 48.

54. EAGLETON, *Reason, Faith and Revolution...* cit., 132.

so secularized there's a sense in which the existence of the supernatural wouldn't matter in the way that it mattered a hundred years ago. Suppose we discovered that we're wrong, that there really is this divine force in the universe. Well, then, most intellectuals would say, okay, that's a fact of physics like any other – instead of just four forces in the universe, we have a fifth force. In this sense, our attitude about the existence of God wouldn't be as important because the world has already become demystified for us. Essentially our worldview would remain even if we discovered that we had been wrong, that God did exist⁵⁵.

Well that's verification out of job, and rightly so. In different terms, we see the dilemma appear in biblical studies. There, we witness a development toward skeptical historical criticism, on the one hand, which creates a reactionary, un-critical (or anti-critical) fundamentalism on the other hand. The latter says such and such happened, reading the Bible in a literalist manner, whilst the former says the Bible's accounts of these supposed events are just not accurate, so not true. Now, what is of interest for us here is that their logic is almost identical. For the un-critical fundamentalist argues that if we were there at, say, Christ's crucifixion, then we would see for ourselves the crucified God and would thus believe. And it is this virtual presence, one mediated by the text, which grounds their faith. Fair enough, one might be inclined to say, but maybe somewhat surprisingly this same logic tends to ground skeptical historical criticism too. For this also presumes that, if we were there, we could see what really went on – it's just that in this case what the Bible claims for the events is not true. So both camps presume a virtual presence to a discrete, fully evident event. But of course this misses the vital point, one represented in the idea of a *non-believing witness* – someone who witnesses what the believer says happened, but still does not believe. This disrupts the logic of both the un-critical and historical-critical readings. The Bible records many people who were at Christ's crucifixion yet did not see what the believers say they saw. Conversely, those who were not there believe what was said by some to have occurred. But in the end it is not a dispute between who was there and who was not, or between their various

55. SEARLE, "God, Mind, and Artificial Intelligence: An Interview with John Searle", in *Free Inquiry* 18, no. 4 (Fall 1998) 39–41, here at p. 39.

accounts of what actually happened. The whole point of the biblical account is that men and woman could quite easily crucify God's Son and not notice. It's not that they didn't notice a man called Jesus, who hailed from Nazareth. They heard them, and they saw him, and they still nailed him to a cross. It should be of little surprise, then, that those who first see the resurrected Christ do not recognize him (recall the road to Emmaus). In light of this, we should expand our notion of truth – recall Chesterton, who cannot verify his birth – to include an element of trusting others. Likewise we cannot verify love, just as we cannot in a sense verify a person as such (see below). And even when we do “see” something, or feel something, think or believe something, its reality is still highly questionable – witness the problem facing colour, not to mention our entire intentional lives, at least according to materialists (again, see below).

Van Fraassen seems to be a little more up to date than Dawkins, Wilson, and Hitchen, when he tells us that «Rationality is only bridled irrationality»⁵⁶. Rest assured Van Fraassen is not going “all postmodern” on us. But he has obviously spent some time in the library actually reading philosophy of science and investigating the empirical practice of science. His point is that all scientific theories are undetermined by the evidence – that is, there is more than one theory that could fit the data. But more importantly, the point is that all science is provisional and is not part of some Whig history of the great march of truth. The situation in which science forever finds itself is more like this: «All our factual beliefs are to be given over as hostages to fortune, to the fortune of future empirical evidence»⁵⁷. And we must remember that the future remains forever, that's why we call it the future, after all. Polanyi gives an insightful analogy for the growth of science. For, on the one hand, it appears to be a like a statue which, at each stage of its composition, looks to be complete. But if we pay any attention to the actual changes in science, «it would appear to change its meaning on the addition of every successive fragment – to the great and ever renewed surprise of the bystanders». We need only notice the move from Ptolemy to Copernicus and, even more

56. VAN FRAASSEN, *Laws and Symmetry*, Oxford University Press, Oxford 1989, 172.

57. ID., *The Empirical Stance...* cit., 63.

strikingly, from Newton to Einstein, Heisenberg, Bohr and beyond⁵⁸. For just this reason, Karl Popper tell us that

We must not look upon science as a “body of knowledge”, but rather as a system of hypotheses which in principle cannot be justified, but with which we work as long as they stand up to tests, and of which we are never justified in saying that we know they are “true” or “more or less certain” or even probable⁵⁹.

This position is referred to as “fallibilism” – all our so-called knowledge is inherently revisable, or subject to correction. Indeed, Popper continues to tell us that «The empirical basis of objective science has nothing “absolute” about it. Science does not rest upon solid bedrock. The bold structure of its theories rise, as it were, above a swamp»⁶⁰. Apparently, there are no swamps in Dawkins’ Oxford. So we must surrender the old-fashioned view of science as some sort of unblemished, pristine virgin, and liken her instead to someone involved in a marriage – with reality. And as we all know, marriages have their ups and downs, their sleepless nights, fast and famine. As Henri Poincaré says,

The ephemeral nature of scientific theories takes by surprise the man of the world. Their brief period of prosperity ended, he sees them abandoned one after the other; he sees ruins piled upon ruins; he predicts that theories in fashion today will in a short time succumb in their turn, and he concludes that they are absolutely in vain. This is what he calls the bankruptcy of science⁶¹.

This bankruptcy is now called the pessimistic induction⁶². In addition, as already mentioned, there are those who speak of the underdetermination of theories, which, to repeat, simply means there are other

58. POLANYI, *Logic of Liberty: Reflections and Rejoinders*, Routledge & Keegan Paul, London 1951, 110.

59. K. POPPER, *The Logic of Scientific Discovery*, Hutchinson, London 1959, 317.

60. *Ibid.*, 111.

61. H. POINCARÉ, *Science and Hypothesis*, trans. W. J. GREENSTREET, Dover, New York 1952, 160.

62. See STANFORD, *Exceeding our Grasp...* cit., 7.

theories that equally fit the empirical evidence. For this and other reasons, Stanford argues that the

historical record of scientific inquiry provides compelling evidence that recurrent, transient underdetermination is our actual epistemic predicament in theoretical science rather than a speculative possibility⁶³.

Of course there is the perennial temptation to always think that current science is “true”. But this is similar to the temptation to which we all succumb when dressing to go out to a party. We have a quick look in the mirror and think “Yea, this outfit looks pretty good, hair’s not too bad, and on we go”. Alas, ten years later, when we look back at a photo taken that evening, we are aghast at the ugly attire we were wearing – how in the world could we have allowed ourselves to go out looking like that? The mistake, of course, is to presume that what we are wearing at that moment is not just as hideous, at least from the perspective of ten years hence, or even another ten years later. This is how Stanford assesses a similar temptation in science:

We can see the realist inference from success to approximate truth and/or reference as self-undermining, for if the success of current theories leads us to conclude that they are approximately true and/or referential, this implies in turn that many past theories must have been radically false and/or nonreferential despite being successful, undermining our original ground for concluding that current theories are approximately true and/or referential in the first place⁶⁴.

Consequently, we should heed the words of Joseph Conrad when he tells us that «vanity plays lurid tricks with out memory»⁶⁵. For, as Stanford notes,

one and the same present theory is used both as the standard to which components of a past theory must correspond in order to be judged true

63. *Ibid.*, 18.

64. *Ibid.*, 146.

65. J. CONRAD, *Lord Jim*.

and to decide which of that theory's features or components enabled it to be successful. With this strategy of analysis, an impressive retrospective convergence between our judgments of the sources of a past theory's success and the things it "got right" about the world is virtually guaranteed⁶⁶.

Moreover,

What our historical cases suggest... is that the rejected posits of past theories, like ether, phlogiston, gemmules, stirrups, and biophors... were simply not any less intimately involved in the predictive and explanatory accomplishments of those theories than genes, atoms, molecules and the electromagnetic field are in our own⁶⁷.

Take the atom, for example. The word means undividable. But of course this is no longer appropriate given our current understanding. Yet we do not just abandon the concept when radical changes in our conception of it have occurred (and will no doubt occur again). We still use the term, then, even though our thinking about it has completely and fundamentally changed. Astrophysicist John Gribbin outlines our situation well:

The point is that we really don't know what an atom is "really"; we cannot ever know what an atom is "really". We can only know what an atom is like. By probing it in certain ways, we find that, under certain circumstances, it is "like" a billiard ball. Probe it another way and we find it is "like" the Solar System. Ask a third set of questions, and the answer we get it is like a positively charged nucleus surrounded by a cloud of electrons. These are all images we carry over from the everyday world to build up a picture of what an atom "is". We construct a model, or an image: but then, all too often, we forget what we have done, and confuse image with reality⁶⁸.

66. STANFORD, *Exceeding our Grasp...* cit., 166.

67. *Ibid.*, 173.

68. J. GRIBBIN, *Schrödinger's Kittens and the Search for Reality: Solving the Quantum Mysteries*, Little, Brown & Co., New York 1996, 186. «According to our best science, there are no elementary "particles" or basic particulars at all... What have seemed to be "particles" are now conceptualized as particle-like processes and interactions resulting from the quantization of field processes and interactions», M. H. BICKHARD – D. T.

Charles Taylor writes that

To hold that there are no assumptions in a scientist's work which aren't already based on evidence is surely a reflection of a blind faith, one that can't even feel the occasional tremor of doubt⁶⁹.

And of course, all science is grounded in forms of faith, some good, and some bad. Good faith is faith in the very possibility of science, one that is based on a belief in the efficacy of reason and the pre-scientific life (*Lieb*) of the scientist (the hand that wields Ockham's razor, so to speak). Bad faith involves what Eagleton refers to as science's «high priests, sacred cows, revered scriptures, ideological exclusions, and rituals for suppressing dissent», ontological naturalism, atheism, reductive materialism, scientism, universal Darwinism, instrumentalism, are all manifestations of these (see below). To take a further example, someone like Dennett will argue that religion is natural and, for that reason, cannot be thought of as true. Or as Hart puts it: «Dennett's amazing discovery that the "natural desire for God" is in fact a desire for God that is natural, it amounts to a revolution not of thought, but only of syntax»⁷⁰. This is a fideism of incredible proportions. And as Polanyi points out,

Men go on talking the language of positivism, pragmatism, and naturalism for many years, yet continue to respect the principles of truth and morality which their vocabulary anxiously ignores⁷¹.

We can achieve this double bookkeeping only by a sort of schizophrenic suspension of logic. Again, this is like the common man in the time of the Nazis who carried out his menial task, detached from its contribution to the cause of National Socialism. Against this, as Polanyi argues, «The coherence of science must be regarded as an expression of

CAMPBELL, "Emergence", in P. BØGH ANDERSEN – P. VOETMANN CHRISTIANSEN – C. EMMECHE – N. OLE FINNEMANN (eds.), *Downward Causation: Minds, Bodies and Matter*, Aarhus University Press, Aarhus, Denmark 2000, 332.

69. C. TAYLOR, *A Secular Age*, Belknap Press of Harvard University Press, Cambridge, MA 2007, 835.

70. HART, *Atheist Delusions...* cit., 8.

71. POLANYI, *Personal Knowledge...* cit., 233.

the common rootedness of scientists in the same spiritual reality»⁷². And if the fashionable, deluded secular aficionados would dismiss any such corporate rootedness, then they need only take note (as they always do in their everyday lives) of the phenomenon of their own subjectivity, for there lies the common source of all intelligence and rationality, not to mention faith. There is, therefore, a connection between science, faith, and society⁷³. Polanyi gives the example of a type of watch, recently invented by some man. If the inventor submits his application for a patent but his application contains only a physical-chemical description of the watch, then any patent issued will only prohibit the production of an exact physical replica – this precise watch, in other words, and not the type of watch it is. To prevent that, the inventor would need to appeal to the form of which this watch is an instance⁷⁴. But though science depends on form, it must receive such insight as it lies outside the competence of its discourse. We cannot, therefore, approach science or the empirical as if we could do so outside tradition, outside selected values, criteria, etc. And this is not to advocate relativism. Indeed, to deem this a form of relativism would be to share the same default position as the creationists regarding what constitutes truth. It would bespeak a vulgar form of literalism, one that is, in the end, devoid of people.

Like van Fraassen, Edmund Husserl rails against the substructions of science which are approached as if they were reality itself. As Husserl puts it,

whatever may be the chances for realizing, or the capacity for realizing the idea of objective science in respect to the mental world (i.e., not only in respect to nature), this idea of objectivity dominates the whole universitas of the positive sciences in the modern period, and in the general usage it dominates the meaning of the word “science”. This already involves a naturalism insofar as this concept is taken from Gallilean natural science, such that the scientifically “true”, the objective world, is always thought of in advance as nature, in an expanded sense of the word. The contrast between

72. ID., *Logic of Liberty*... cit., 48.

73. See ID., *Science, Faith and Society*, University of Chicago Press, Chicago 1964, 73.

74. See ID., *Society, Economics, and Philosophy: Selected Papers*, R. T. ALLEN (ed.), Transaction Publications, New Brunswick, NJ 1997, 87.

the subjectivity of the life-world and the “objective”, the “true” world, lies in the fact that the latter is a theoretical-logical substraction of something that is not in principle perceivable, in principle not experienceable in its own proper being, whereas the subjective, the life-world, is distinguished in all respects precisely by its being actually experienceable. The life-world is the realm of original self-evidences⁷⁵.

It is for this reason that objective knowledge is bankrupt⁷⁶. For it is a lie, denying its own animality, its own life, indeed its own evolution, and, lastly, its very possibility. Now, of course such bankruptcy is not inherent but rather contingent. As Van Fraassen rightly says, science is an objectifying discourse, one that has brought us untold riches, but, he asks,

what does it profit us to gain the whole world and lose our own soul? Riches come with a temptation, a tempting fallacy, namely, to have us view them as all there is to be had, when they are so much. This is true of all riches, and it is true of the riches of objective knowledge. Poor are the rich who succumb to this fallacy⁷⁷.

And scientism is just such poverty, as Bulgakov tells us,

Scientism is but a pose assumed by life, a moment in life. Therefore it cannot and should not legislate over life, for it is really its handmaiden. *Scientia est ancilla vitae*. Scientific creativity is immeasurably narrower than life, for the latter is living⁷⁸.

And all moments, if they are to be true to themselves, must pass. Science, in other words, must forever return to the source of its possibility and not deny its origins, or its future. For all science has arrived from an

75. E. HUSSERL, *The Crisis of European Sciences and Transcendental Phenomenology*, trans. D. CARR, Northwestern University Press, Evanston, IL 1970, 127. For a comparison of van Fraassen and Husserl on this point, see M. BITBOL, “Materialism, Stances and Open-Mindedness”, in B. MONTON (ed.), *Images of Empiricism: Essays on Science and Stances with a Reply from Bas van Fraassen*, Oxford University Press, Oxford 2007, 234.

76. See HUSSERL, *The Crisis of European Sciences ... cit.*, 88.

77. VAN FRAASSEN, *The Empirical Stance... cit.*, 195.

78. BULGAKOV, *Philosophy of Economy... cit.*, 182.

enabling past and will develop and evolve into an unknown future; and only the tension between these two poles allows science to be true to itself. Therefore we must realize, as Husserl tells us, that «The concrete life-world, then is the grounding soil [*der gründende Boden*] of the “scientifically true” world and at the same time encompasses it in its own universal concreteness»⁷⁹. Or as Bulgakov puts it:

Science is a function of life; it is born in the process of labour, and the nature of all life is economic, that is, has the aim of defending or expanding life. Life never rests; it is in a state of ceaseless tension, actuality, and struggle⁸⁰.

Indeed life is the very possibility of the physical, of the physical to appear to itself, to the point that it can speak, to the point that it can write *The Origin of Species*⁸¹. Consequently, scientism, or reductionism in all its forms, must be «hunted down as persistently as dogmatism»⁸². The primal validity of the lifeworld (*Lebenswelt*), of the subjective givenness of experience, for it is this which both grounds and makes possible the objective world of science, without which science is quite simply impossible. And when such impossibility is ignored, destructive ideology is all that is forthcoming.

As we know, the problem that science presents only arises when its methodology is assigned ontological significance, that is, when it is kidnapped by naturalism. As Bulgakov says, «the false assumption that a scientific relation to reality is in fact the deepest and most authentic takes root and flourishes, and the intentional limits of science are forgotten»⁸³. Moreover, despite the infinite riches that science provides, along with its impressive complexity, it remains “extraordinarily simple, elementary

79. HUSSERL, *The Crisis of European Sciences...* cit., 131.

80. BULGAKOV, *Philosophy of Economy...* cit., 181.

81. See M. VILLELA-PETIT, “Cognitive Psychology and the Transcendental Theory of Knowledge”, in J. PETITOT – F. J. VARELA – B. PACHOUD – J.-M. ROY (eds.), *Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science*, Stanford University Press, Stanford, CA 1999, 513.

82. N. DEPRAZ, “When Transcendental Genesis Encounters the Naturalization Project”, in PETITOT – VARELA – PACHOUD – ROY (eds.), *Naturalizing Phenomenology...* cit., 474.

83. BULGAKOV, *Philosophy of Economy...* cit., 184.

and impoverished in its task”⁸⁴. Indeed it is such simplicity or impoverishment that is the secret of science’s success, which is more than fine if and when its task is both situated and delineated in proper fashion. Otherwise the temptation to misunderstand science – that is, to make of it a philosophy – will in the end undermine, or at least threaten to undermine, the practice of science itself. Again, we must remember there are no scientists in science. But properly understood, science is itself the opposite of that which it produces. For it may well be the great vivisectionist – it may well turn nature into a corpse, and it does indeed commit a form of murder – but it does so from a position that is otherwise than dead. For science, as we said, is itself a moment of life. And if this is forgotten, then science is betrayed by its own brand of fundamentalism, just as religion can also be similarly corrupted by those who misapply it or misunderstand it. But as we know, this constant temptation is ever-present due to the very methods of science. As Jonas points out,

For its part, the science of biology – being limited by its methods to external physical facts – must ignore the dimension of inwardness that is part of life. In so doing, it leaves material life, which it claims to have totally explained, more mysterious than when it was unexplained⁸⁵.

Consequently, what the scientific worldview desperately needs is systematic inquiry into first-person experience, for then, as Bitbol says, «our soul is regained, even within science»⁸⁶. Although we should point out that the unity of science is a myth – in other words, there is no “science” as one thing, so to speak⁸⁷. Nor is there any such thing as a *scientific worldview* in any monolithic sense. As Bulgakov says,

84. *Ibid.*, 186.

85. H. JONAS, *Mortality and Morality: A Search for the Good after Auschwitz*, L. VOGEL (ed.), Northwestern University Press, Evanston, IL 1996, 59.

86. See BITBOL, “Materialism, Stances and Open-Mindedness”... cit., 259.

87. See J. DUPRÉ, “The Miracle of Monism”, in *Naturalism in Question*, 39. Also see N. CARTWRIGHT, *How the Laws of Physics Lie*, Oxford University Press, Oxford 1983; and, lastly, ID., *The Dappled World: A Study of the Boundaries of Science*, Cambridge University Press, Cambridge 1999.

We mustn't forget that sciences create their own objects, set up their own problems, and determine their own methods. There can thus be no single scientific picture of the world, nor can there be a synthetic scientific worldview⁸⁸.

Returning to Bitbol's call for an investigation into first-person experience, the importance of which becomes clear if we pay attention to the absurdity of scientism:

In order to provide a complete account of the physical world it will be necessary to give an account of how... theories of science themselves, as part of the physical world, are also outcomes of the laws which the theories express. A complete theory will thus need to be self-referential, so that in addition to providing the laws of the universe, those laws will need to be capable of providing an account of how human observers, as a certain combination of physical constituents on a planet in one part of the universe, will necessarily formulate at a certain point in time, through physical activity in their brain, the true theory of the universe⁸⁹.

In light of the many absurdities that scientism involves (including the one just mentioned), Kagan also calls for an expanded perspective on our intellectual practices and disciplines:

The concepts in the social sciences and the humanities refer to emergent phenomena that cannot be described with the vocabulary used by natural scientists. The timbre of a violin sonata cannot be translated into the physicists terms for frequency, intensity and time; the balance in a Monet painting cannot be translated into sentences referring to colour, contour or shape, and... the meaning psychologists attribute to the terms remember, count, or fear cannot be replaced with statements referring only to brain states and structures⁹⁰.

For this reason, Kagan moves beyond C. P. Snow's idea of two cultures (namely, science, and all the rest) and instead calls for three cultures,

88. BULGAKOV, *Philosophy of Economy...* cit., 161

89. H. LAWSON, *Closure: A Story of Everything*, Routledge, London 2001, xxix-xxx.

90. KAGAN, *The Three Cultures...* cit., 14.

each with their own intrinsic, veridical logics, terms, and concepts. And if we do not heed Kagan's advice, surely we have again rejected evolution. But it is not just a matter of the social sciences and the humanities that have emerged from evolution. It is a matter of science too, for science is itself a human practice, which means that, in its truest, most eminent form, science is part of the humanities, in soul if not in body.

In leaving behind this fictional science vs. religion war, how should we finally characterize the relation between them? We think that such activities of the mind as religion and science can be thought of like lovers, in which case it is their difference that allows for desire whilst at the same time providing some sense of union. For both converge on the truth, just as both are moved by a desire for truth. But what is it that encourages such a distortion of science, its veritable corruption? The short but correct answer is both materialism and naturalism, to which we now turn.

5. MATERIALISM'S GHOSTS

*Slowly we are learning,
We at least know this much,
That we have to unlearn
Much that we were taught,
And are growing chary
Of emphatic dogmas;
Love like Matter is much
Odder than we thought.*
W. H. Auden

In this section we examine the doctrine, or philosophical position, called materialism. What we will discover is that materialism fails on every count. It is vacuous and question-begging, unscientific, and indeed self-hating. In other words, materialists hate matter. Moreover, they misrepresent matter, but in so doing they are, like some latter-day Macbeth, forever haunted by the ghost of the very thing they have sought to kill, namely, the material.

In precise terms, materialism is dead. It is dead because it is incoherent at every level of analysis; what we find in its place today is a combination of ideology and wishful thinking. Indeed to invoke matter today as the most basic term of our philosophical worldview is equivalent to saying “God did it”. And the irony is that in its present guise materialism represents, not a realistic, salt-of-the earth, away-with-the-nonsense philosophy, but rather an extreme form of idealism that has nothing whatsoever to do with the natural world. Nor has it anything to do with science. And why has this fate befallen materialism? Because matter has been found out, its pretense rumbled – because matter, quite simply, does not exist, at least not in the manner that materialism requires. In short, matter is inscrutable. Likewise, bodies are no longer available in any simplistic sense. As Noam Chomsky says, «Newton exorcised the machine, not the ghost», by which he means that the Cartesian understanding of mechanics was found to be wrong; and in its place it was

necessary to invoke what Newton called an “occult quality” to account for the simplest phenomena of nature, a fact that he and other scientists found disturbing and paradoxical. These moves also deprive us of any determinate notion of body or matter.... With the collapse of the traditional theory of “matter” or “body”, metaphysical dualism becomes unstateable; similarly, such notions as “physicalism” or “eliminative materialism” lose any clear sense⁹¹.

Chomsky continues: «The supposed concepts “physical” or “material” have no clear sense.... There seems to be no coherent doctrine of materialism and metaphysical naturalism, no issue of eliminativism, no mind-body problem»⁹². Bitbol echoes this view: «Material bodies are no longer the basic objects of physics.... Ironically, the notion of material body motivated the very research that eventually dissolved it»⁹³.

91. Noam Chomsky, unpublished manuscript, quoted in W. G. LYCAN, “Chomsky on the Mind-Body Problem”, in L. M. ANTONY – N. HORNSTEIN (eds.), *Chomsky and His Critics*, Blackwell, Oxford 2003, 12.

92. N. CHOMSKY, “Naturalism and Dualism in the study of Language and mind”, in *International Journal of Philosophical Studies* 2, no. 2 (1994) 181-209, here at 195-196.

93. BITBOL, “Materialism, Stances and Open-Mindedness”... cit., 243. Also see ID., “Le corps matériel et l’objet de la physique quantique”, in F. MONNOYEUR (ed.), *Qu’est-ce*

A major problem facing materialism, already intimated above, stems from something referred to as Hempel's Dilemma⁹⁴. In general terms, naturalism is usually thought to assert that all that exists can be explained naturally, using the laws of nature and so on; but of course what "nature" is, what qualifies as "natural", seems to be rather open. The next move is to appeal to physics, arguing that philosophy should invoke whatever physics says is the basic and therefore true description of the natural or physical world. But the problem then becomes one of adequacy, for in terms of the mind, for example, there is no worked-out physical theory. So we must appeal to some *future physics*. But because we have no idea what that future, supposedly complete physics will say (what its terms, concepts or content will be), the whole procedure appears to be wholly vacuous and question-begging. As Crane and Mellor point out,

The "matter" of modern physics is not at all solid, or inert, or impenetrable, or conserved, and it interacts indeterministically and arguably some times at a distance. Faced with these discoveries, materialisms' modern descendants have – understandably – lost their metaphysical nerve⁹⁵.

By this Crane and Mellor mean that materialism has just rolled over, remaining now only as a slave to a theoretically complete physics, which now defines the empirical world. In other words, materialism is a misnomer. Moreover, it is so weak and paltry that it cannot even hold onto its one, primitive term, namely, matter. Crane and Mellor continue:

For those whom reduction to physics is the touchstone of the physical do not propose to do it in practice. They simply insist that it can be done "in principle". But what is the principle? It cannot be physicalism. These sciences cannot be reducible in principle because they are physical, if reduc-

que la matière?: egards scientifiques et philosophiques, Le Livre de Poche, Paris 2000.

94. See C. G. HEMPEL, "Reduction: Ontological and Linguistic Facets", in S. MORGENBESSER – P. SUPPES – M. WHITE (eds.), *Philosophy, Science, and Method: Essays in Honor of Ernest Nagel*, St. Martin's Press, New York 1969, 179-199.

95. T. CRANE – D. H. MELLOR, "There is No Question of Physicalism", in P. K. MOSER – J. D. TROUT (eds.), *Contemporary Materialism: A Reader*, Routledge, London 1995, 66.

ibility in principle (RIP) is supposed to tell us which sciences could “in principle” be reduced to physics⁹⁶.

It seems there is no principle involved; rather there is only the dogma of ideology, in this case, “no theology”⁹⁷. Indeed, the whole appeal to the physical is one purely of emotion and not argument⁹⁸. And there is something else rather strange going on in this hopeful appeal to the physical, for why should the ‘physical’ permit reduction? In other words, why are sub-atomic particles, or whatever, so destructive that their very existence would suddenly rid us of the natural world, of the human mind, and so on⁹⁹? Surely, this is just Gnosticism.

Van Fraassen refers to the “contrastive nature of explanations”¹⁰⁰. In other words, explanations which say $X=B$ do so in a manner that inform us of why this is the case – why, that is, X is not C . But materialism and physicalism appear to fail this test miserably. Rather, all they offer is the desperate sweat of the compulsion to destroy. It is the Freudian death drive made manifest, for they would rather deny the world, and have nothing, than have something there for which they just might have to give thanks, or at least for which they should be thankful. So it seems all we are left with is what amounts to a promissory materialism, a presumptive materialism, or indeed a materialism of the gap¹⁰¹. Like ghosts of philosophy past, we are haunted by the spirit of materialism¹⁰². This is maybe somewhat analogous to the idea of fashion, for as we noted earlier it keeps changing precisely because nothing is truly fashionable. Likewise, the shifting sands of materialism and its strained efforts belie hollowness, one that Nietzsche would recommend we expose with a hammer, gently tapping the sides of this modern idol, being greeted by

96. *Ibid.*, 67.

97. *Ibid.*, 70.

98. *Ibid.*, 85.

99. See *Ibid.*, 69.

100. See VAN FRAASSEN, *The Scientific Image...* cit., chapter 5.

101. Promissory materialism is Popper’s phrase, see VAN FRAASSEN, *The Empirical Stance...* cit., 9, and lastly for a materialism of the gaps, see WALLACE, *The Taboo of Subjectivity...* cit., 128.

102. See VAN FRAASSEN, *The Empirical Stance...* cit., 58.

a telling sound. This is the intractable *je ne sais quoi* of materialism¹⁰³. Due to the fluid nature of all characterizations of matter in science and beyond, materialism suffers a demarcation problem. In other words, how does it articulate its own stance in a well-principled manner, a manner that would allow it to stand out from other, different, stances or philosophical positions? Put another way, if our conception of matter is ever-changing, how does materialism prevent itself from being washed away in a sea of vacuity¹⁰⁴? Isn't the problem, as already mentioned, that matter is an ideal, a wishful, hopeful thought? Little surprise, then, that Popper refers to promissory materialism¹⁰⁵. It is promissory, first, because we must wait (perpetually, it seems) for a robust definition of matter, and second, because we must wait for materialism to sort out its many self-inflicted philosophical problems (some day, we are told). Here is van Fraassen's diagnosis of materialism: it is not a theory but merely a cluster of attitudes, including a strong deference to science, which encourages materialism to «accept (approximative) completeness claims for science as actually constituted at any given time»¹⁰⁶. But where, we must ask, is the science in that? Here we are told to fool ourselves into pretending that the provisional is definitive; and then when it does change, which is inevitable, we are told to try and look as casual as possible..

Consequently, materialism is, it seems, a prime example of false consciousness, for it presents itself as a cogent theory when, in reality, it is more of a stance, an expression of attitudes, even an ideology. This is true because the assertion that “matter is all there is” merely wanders around the lip of nothingness, as it is totally lacking in substance. This is indeed, why we can speak of materialism's ghosts. As Bertrand Russell said, «Matter has become as ghostly as anything in a spiritualist séance»¹⁰⁷. In short, as Chomsky makes clear, «The notion of “physical world” is open and evolving»¹⁰⁸. This is no doubt a veritable crisis for materialism.

103. See *Ibid.*, 59.

104. See BITBOL, “Materialism, Stances and Open-Mindedness”... cit., 235.

105. See K. POPPER – J. C. ECCLES, *The Self and Its Brain: An Argument for Interactionism*, Springer, Berlin 1977, 96–8.

106. See VAN FRAASSEN, *The Empirical Stance*... cit., 59.

107. B. RUSSELL, *An Outline of Philosophy*, Routledge, London 1927, 78.

108. CHOMSKY, *Rules and Representations*, Columbia University Press, New York 1980, 5.

Ironically, materialism is a progeny of Cartesianism. As Husserl points out,

Galileo abstracts from the subjects as persons leading a personal life; he abstracts from all that is in any way spiritual, from all cultural properties which are attached to things in human praxis. The result of this abstraction is the things purely as bodies; but these are taken as concrete real objects; the totality of which makes up a world which becomes the subject matter of research. One can truly say that the idea of nature as a really self-enclosed world of bodies first emerges with Galileo. A consequence of this, along with mathematization, which was too quickly taken for granted, is the idea of a self-enclosed natural causality in which every occurrence is determined unequivocally in advance. Clearly this the way is thus prepared for dualism, which appears immediately afterwards in Descartes.... The world splits, so to speak, into two worlds: nature and the psychic world, although the latter, because of the way in which it is related to the nature, does not achieve the status of an independent world¹⁰⁹.

It is said that dualism became a rejected philosophical position, and in its Cartesian form that is certainly the case. The point here, however, is that the failure of materialism is the last death throes of that dualism. And that is something to be welcomed because, as Jaki makes clear, from a theological point of view,

Nothing could so badly discredit the glory of the one God than cutting the universe into parts of which some were rational and some irrational. While this procedure is compatible with certain philosophies, it is wholly alien to the philosophical framework of creative science as found in the thinking of all great creators of science¹¹⁰.

Along with many others, Siewart draws a parallel between Cartesianism and eliminative materialism.

109. HUSSERL, *The Crisis of European Sciences ... cit.*, 60.

110. JAKI, *Chance and Reality and other Essays*, University Press of America, Lanham, MD 1986, 176.

Descartes granted a certain privileged epistemic status to our judgments about what is “in our minds” relative to judgments about what is “outside of them”, in the realm of matter. And the eliminativist recognizes a similar asymmetrical epistemic relation between the “mental” and the “physical” – only the assignments of privilege and subordinate status are reversed. Our right to claims made in a mind-including idiom is made to depend entirely on their providing the best theory of what is conceived of in a mind-excluding one, while our right to apply this latter conception does not in turn depend on our warrant for claims about attitudes and experience¹¹¹.

And, importantly, from this reversal or inversion of Cartesian epistemology there came an ontological reversal as well. With Cartesianism there was a temptation to ignore matter, or to deny its reality. So also with eliminativism there is a similar temptation, because there is a great deal of difficulty in understanding the mind, so maybe it is just best to give up on the beast and thus deny its existence. As Stapp points out,

The conflating of Nature with the impoverished mechanical conception of it invented by scientists during the seventeenth century has derailed the philosophies of science and of mind for more than three centuries, by effectively eliminating the causal link between the psychological and physical aspects of nature that contemporary physics restores¹¹².

We shall elaborate on this below. The main point for the moment, as already suggested by Chomsky and others, is that this dualism, of which materialism is an example, cannot now even get off the ground, for as we know it was premised on privileging one side of a divide that no longer exists. And this is especially true of materialism’s building blocks, for these represented the possibility of any and all reductionism. The problem remains, however, because even though this old-fashioned worldview has been falsified completely, it still exerts a damaging, because misleading, influence on how the debates surrounding mind and matter

111. CH. P. SEWERT, *The Significance of Consciousness*, Princeton University Press, Princeton, NJ 1998, 53.

112. H. P. STAPP, *Mindful Universe: Quantum Mechanics and the Participating Observer*, Springer-Verlag, Berlin 2007, 2.

are conducted. Against this pejorative understanding of matter, and in light of its elusive nature, we should, it seems, agree with the theologian Karl Rahner, «Matter...is the outward expression and self-revealing of personal spirit, in the finite realm. Consequently, by its very origin it is akin to spirit»¹¹³. Or as the current Pope says, «Matter itself is rational, even though there is much that is irrational, chaotic, and destructive on the long path of evolution»¹¹⁴.

6. NATURALIZING NATURALISM

The reason for the failure of rational culture... lies not in the essence of rationalism itself but solely in its being rendered superficial, in its entanglement in naturalism and objectivism.

Edmund Husserl¹¹⁵

Materialism is dead. Long live materialism! That is to say, the ever-determined atheist abandons materialism – but only in name. For he then proceeds to establish a successor theory, and this is baptized naturalism¹¹⁶. As Eddington pointed out, «Materialism in its literal sense is long since dead. But its place has been taken by other philosophies which represent a virtually equivalent outlook»¹¹⁷. Naturalism is, according to Quine, the «abandonment of the goal of a First Philosophy prior to natural science»¹¹⁸. But naturalists do not leave it there. They also claim that “philosophy is continuous with the natural sciences”¹¹⁹. But things are not so neat and tidy, for this progeny of materialism suffers many of the same

113. K. RAHNER, *Hominisation: The Evolutionary Origin of Man as a Theological Problem*, trans. W. T. O'HARE, Herder and Herder, New York 1965, 60-61.

114. BENEDICT XVI, *Creation and Evolution*, 163.

115. HUSSERL, *The Crisis of European Sciences ...* cit., 299.

116. For three very impressive critiques of naturalism, see REA, *World Without Design...* cit.; CH. TALIAFERRO – S. GOETZ, *Naturalism (Interventions)*, Wm. B Eerdmans, Grand Rapids, MI 2007; and lastly, J. P. MORELAND, *The Recalcitrant Imago Dei: Human Persons and the Failure of Naturalism (Veritas)*, SCM Press, London 2009.

117. EDDINGTON, *Science and the Unseen World...*cit., 30.

118. W. V. QUINE, *Theories and Things*, Harvard University Press, Cambridge, MA 1981, 67.

119. MOSER – TROUT, “General Introduction: Contemporary Materialism”, in ID. (eds.), *Contemporary Materialism...* cit., 9.

problems of its forbear, including the lack of any really clear sense of definition, despite what Quine tell us. For even the “science” of which Quine speaks is somewhat misleading, being «simply Philosophy in dark glasses with a phony passport»¹²⁰. And this philosophy is more of a reactive stance than a creative or positive one. Again, it can be thought of as another version of the “no theology” mantra. It is what Putnam calls the horror of the normative¹²¹. But the point must be made that physical sciences have nothing to say about the realm of reason and rational explanation, which is precisely that of the normative and not of the factual¹²². In other words, the horror stems from the fact that the presence of the normative (a presence which is necessary for the operation of the sciences but that does not belong to them, since they are subalternate sciences, dependant on logics that reside outside their competence, just as architecture depends on geometry) indicates that this shotgun wedding (for it surely arises out of panic) between philosophy and science is simply not working. And this seemingly work-shy philosophy has a great deal to be getting on with. Yet, at the same time, its adherence to naturalism makes such work nigh on impossible. Put another way, the normative announces, in the starkest possible terms, that scientism is a fiction, as is its philosophical lodger, scientific naturalism.

As said, the elusive (nay, slippery) nature of naturalism is revealed when we realise just how hard it is to give it substantive definition; and this inability surely belies its ideological nature, as was the case with materialism. Ernst Nagel, in his 1955 presidential address to the American Philosophical Association, noted that the number of distinguishable doctrines for which the word “naturalism” has been a counter in the history of thought is notorious¹²³. In fact, naturalism is more of a contemporary shibboleth or a pervasive ideology than a robust philosophical theory¹²⁴.

120. M. WILSON, “Honorable Intentions”, in S. J. WAGNER – R. WARNER (eds.), *Naturalism: A Critical Appraisal*, University of Notre Dame Press, Notre Dame, IN 1993, 62.

121. H. PUTNAM, “The Content and Appeal of ‘Naturalism’”, in *Naturalism in Question*, 70.

122. See E. J. LOWE, *Personal Agency: The Metaphysics of Mind and Action*, Oxford University Press, Oxford 2008, 11.

123. E. NAGEL, “Naturalism Reconsidered”, in *Proceedings and Addresses of the American Philosophical Association* 28 (1954 - 1955) 5-17.

124. See HORST, *Beyond Reduction...* cit., 12.

As Stroud points out, naturalism is a bit like world peace: everyone advocates it, but no one has a clue what it means¹²⁵. But apparently, «Naturalism is supposed to be Good thing. So good in fact that everybody wants to be a naturalist, no matter what their views might be»¹²⁶. If not world peace, naturalism is certainly like a religion, one with a very broad church, indeed inclusive to the point of vacuity. As Seager says,

Naturalism expresses more than a faith in, but also the desire to enter into orderly community of the real sciences. This religious feeling comes in familiar varieties: At one extreme, the fundamentalist Unitarian is remembered for the doctrine of the unity of the science, which espoused the outright reduction of every field of knowledge to physics, reserving for all that resisted reduction the ontological hell of nonexistence. At the other extreme we find the New Age liberal theology of mere supervenience, unaccompanied by any attempt at reductive analysis, whose hell is the hell of vacuity and quietism¹²⁷.

Indeed, the most accurate definition of naturalism is probably that of hopeful naturalism (we really just hope there's no God)¹²⁸. But such wishful naturalism really won't get us very far. So there seems to be two choices. On the one hand, we can embrace restrictive naturalism, the no-nonsense, hard-nosed stance that accepts the limits of naturalistic explanation no matter the consequences, even if they include incoherence, rabid skepticism, and the undermining of science (see below). On the other hand, we can follow Stroud, who recommends a much more open form of naturalism but points out that we might just as well call it open-mindedness and therefore drop the otiose, or maybe even distracting, tag of "naturalism", because in the end it is just dogma (in the pejorative sense).

125. STROUD, "The Charm of Naturalism..." cit., 22.

126. W. SEAGER, "Real Patterns and Surface Metaphysics", in D. ROSS – A. BROOK – D. THOMPSON (eds.), *Dennett's Philosophy: A Comprehensive Assessment*, MIT Press, Cambridge, MA 2000, 95.

127. *Ibid.*, 96.

128. *Ibid.*, 96.

7. COGNITIVE SUICIDE

You can't always get what you want, but you might just get what you need.
The Rolling Stones

It is important to bear in mind that nothing in science requires philosophical naturalism. Moreover, the analytic method of philosophy is likewise extrinsic to any attachment we may feel towards naturalism. In short, we can quite happily be scientists or analytical philosophers and reject ontological or restrictive naturalism¹²⁹. So there is nothing regressive or reactionary about rejecting naturalism. Indeed the reverse is true, for such naturalism appears to be damaging to both science and philosophy, and this for many reasons. For our purposes, however, the main reason is that naturalism undermines the veracity of reason, that is, it leads to global irrationalism and skepticism. Below we outline some of the ways in which naturalism leads us into such an intellectual and cultural crisis. When naturalism is ontologised, when it becomes a metaphysical thesis about what can and cannot exist in the world, one of the major consequences is cognitive suicide (a phrase used by Lynne Rudder Baker, Thomas Nagel, and G. K. Chesterton)¹³⁰. Why would this be the case? It is because, as Husserl pointed out, we are then forced into a situation wherein reason is subjected to species relativism (*ein spezifischer Relativismus*), which in reality means relativism *tout court*. There is, in other words, no universal reason by which our thoughts should be judged. Instead reason becomes a wholly local affair, at best, and is itself subordinated to the utilitarian principle of mere survival. But the problem is that there is now a disconnect between survival and truth, for they only ever coincide contingently (more on this below)¹³¹. And ironically, this leaves us in a

129. D. ALEXANDER – R. WHITE, *Beyond Belief: Science, Faith and Ethical Challenges*, Lion Hudson Press, Oxford 2004, 29; also see, A. CORRADINI – S. GALVAN – E. J. LOWE, “Introduction”, in *Analytic Philosophy Without Naturalism*, Routledge, London 2006, 12.

130. Cf. L. RUDDER BAKER, *Saving Belief: A Critique of Physicalism*, Princeton University Press, Princeton, NJ 1987), chapter 7; TH. NAGEL, *The View From Nowhere*, Oxford University Press, Oxford 1986, 52; also see CHESTERTON, *Orthodoxy... cit.*, chapter 3.

131. J. CATALANO, *Thinking Matter: Consciousness from Aristotle to Putnam and Sartre*, Routledge, London – New York 2000, 77.

much more mysterious world than that of the theist, for in an almost Humean sense everything is now “miraculous”, as it is beyond explanation. In light of naturalism or physicalism, Baker argues that lived-life has become mysterious, almost miraculous; this is what she refers to as the bizarre, “spiritualism” of the everyday. For example, in the absence of intentional agents – which, given ontological naturalism, must be the case – social practices that depend upon ordinary explanation and prediction of behaviour become unintelligible¹³². As Stroud points out,

A natural world conceived of only as a totality of all the physical facts obviously does not contain any psychological facts. There are not truths to the effect that someone believes, knows, feels, wants, prefers, or values anything¹³³.

Kauffman echoes Stroud when he tells us «In Physics, there are only happenings, no doings. Agency has emerged in evolution and cannot be deduced by physics»¹³⁴. And this of course includes doing science. Thus to deny agency – by assuming the perspective of ontological naturalism – is to again deny evolution. It is to be anti-evolutionary, for agency is evolution’s most impressive fruit. After all, what is the *Origin of Species*? For it does not exist for reductionism. Therefore, if people (say, creationists) want to deny Darwin’s work, then reductionism is probably their best method for doing so. But of course both Stroud and Kauffman are here denying that that it is inadequate to only appeal to the physical or to the language established by the natural sciences if we are to retain the common sense world in which we take ourselves to be living. So much the worse for us, says the ontological naturalist; but of course, there is no “us”, for this seems to be the ultimate victimless crime. Again, this logic is similar to that employed by the Nazis in relation to the Jews, because by the lights of National Socialism, it too was victimless. Moreover, we cannot even find the Nazis culpable – if, that is, we adhere to naturalism. For as Chomsky says, «general issues of intentionality, including those

132. See BAKER, *Saving Belief...* cit., 130

133. STROUD, “The Charm of Naturalism...” cit., 27.

134. S. A. KAUFFMAN, *Reinventing the Sacred: A New View of Science, Reason, and Religion*, Basic Books, New York 2008, 4.

of language use, cannot reasonably be assumed to fall within naturalistic inquiry»¹³⁵ Take, for example the statement, *Je suis Napoleon*. If someone believes this claim, then we can decide its veracity only by appeal to logic and not to brain states. But logic is not part of the language of neuroscience¹³⁶.

Alvin Plantinga wisely asks us where the content of belief comes from if it is reduced to the status of a neuronal event. Leaving our friend Napoleon for the moment, take the proposition: *Naturalism is all the rage these days*. From where does the naturalist ground the supposed truth of this proposition? Put another way, how does the naturalist discriminate between neuronal events as they may or may not relate to different propositions. Indeed, how do we (naturalistically) individuate neuronal events? To do so suggests that we may in fact have to abandon naturalism; but, then again, naturalism is self-defeating¹³⁷. If this is not to be the case, naturalism must be able to locate a meta-neuronal event, so to speak, which they would call the “naturalism event”. But of course that’s just plain daft. And we must remember, as Uwe Meixner points out, «no brain event intrinsically signifies anything to anyone»¹³⁸. An analogous problem arises when causality of action is dragged through the streets of antecedent neural events, for such an analysis, or pretend analysis, «seems to lose sight of any unifying factor why those apparently independent causal chains of neural events should converge upon the bodily movements in question»¹³⁹. In other words, this analysis suffers its own version of the binding problem: how do they come together in a manner that allows for the identification of a discrete chain, or indeed action? Put another way, here again we cannot individuate such events or actions by appealing only to a naturalist worldview, as it just doesn’t have the conceptual apparatus to cope with this. That is why it tends to deny free will, or eliminate mind altogether, for that way its profound lack of com-

135. CHOMSKY, “Language and Nature”, in *Mind* 104, no. 413 (January 1995) 1–61 at 27.

136. See E. MATTHEWS, *Mind*, Continuum, London 2005, 45.

137. See A. PLANTINGA, “How Naturalism implies Scepticism”, in *Analytic Philosophy Without Naturalism*, 33.

138. U. MEIXNER, “Consciousness and Freedom”, in *Analytic Philosophy Without Naturalism*, 186.

139. LOWE, *Personal Agency*, 53.

petence is masked. But if every room into which naturalism walks smells, then you must ask if in fact it is the rooms that smell.

Nietzsche makes the following observation:

It is unfair to Descartes to call his appeal to God's credibility frivolous. Indeed, only if we assume a God who is morally our like can "truth" and the search for truth be at all something meaningful and promising of success. This God left aside, the question is permitted whether being deceived is not one of the conditions of life¹⁴⁰.

Nietzsche's question seems to be eminently sensible. And in light of adaptationism (the view held by some that natural selection is responsible for all or at least most of the features we see in the world)¹⁴¹ – Fodor appears to agree:

When applied to the evolution of cognition, the theory of natural selection somehow entails or at a minimum strongly suggests, that most of our empirical beliefs aren't true; a fortiori, that most of our empirical scientific theories aren't true either. So the rumor is that Darwinism – which, after all, is widely advertised as a paradigm of scientific success (I've heard it said that Darwinian adaptationism is the best idea that anybody's ever had, and that natural selection is the best confirmed theory in science) – Darwinism, of all things, undermines the scientific enterprise. Talk about biting the hand that feeds you!¹⁴²

The point is simply that Darwin is not in the epistemology business. His theory is not about knowledge, in other words, but about survival. Therefore, «Evolution is neutral as to whether most of our beliefs are

140. F. NIETZSCHE, *Writings from the Late Notebooks*, Cambridge University Press, Cambridge 2003, notebook 36, June–July 1885, 26; quoted in A. PLANTINGA – M. TOOLEY, *Knowledge of God. Great Debates in Philosophy*, Blackwell, Malden MA 2008, 30.

141. For a critique of adaptationism, see CUNNINGHAM, *Evolution: Darwin's ...cit.*, Chapter Three.

142. J. FODOR, "Is Science Biologically Possible?," in J. BEILBY (ed.), *Naturalism Defeated? Essays on Plantinga's Evolutionary Argument Against Naturalism*, Cornell University Press, Ithaca, NY 2002, 31. It is no surprise then, that Fodor has been developing a very significant and sophisticated critique of adaptationism.

true. Like Rhett Butler in the movies, it just doesn't give a damn»¹⁴³. Now, of course, this may well be the case when it comes to extending the reach of Darwinism beyond biology and into our minds. But what about naturalism itself, we might ask? The problem is that naturalism is wedded to adaptationism, for otherwise it simply does not have an explanation for the human mind. And this uncomfortable situation – uncomfortable for the advocate of naturalism – leads them to indulge in all manner of exotic, desperate explanations of the mind, the best one being that there is no such thing, which seems to be an eminent example of Bill Livant's cure for baldness: you just shrink the head until the remaining hair covers what's left¹⁴⁴.

Plantinga brings the absurdity of naturalism to our attention:

If naturalism were true, there would be no such thing as proper function, and therefore also no such thing as malfunctions or dysfunction. Hence, there would be no such thing as health or sickness, sanity or madness, further, and in this epistemological context crucial, there would be no such thing as knowledge¹⁴⁵.

To this we would add people, life, death, violence, ethics, beauty, and so on¹⁴⁶. And of course this is not an argument from incredulity. Just because we find it shocking and hard to accept, in other words, does not mean it is not true. No, because the problem is not one of credulity or incredulity in relation to the truth of some view; rather, the problem is whether there is even such a thing as truth. Plantinga's point is that, given naturalism and the emergence of our cognitive faculties through natural selection, it would be nothing short of a miracle if our beliefs turned out to be true¹⁴⁷. As Plantinga puts it,

143. *Ibid.*, 42.

144. W. LIVANT, "Livant's Cure for Baldness", *Science and Society* 62, no. 3 (1998) 471–473; Dawkins' notion of the gene is a similar cure, see *Chapter Two* above.

145. Alvin Plantinga, in PLANTINGA - TOOLEY, *Knowledge of God...* cit., p. 1.

146. See CUNNINGHAM, *Evolution: Darwin's ...* cit., Chapter Six; also see ID., "The End of Death", "Lacan, Philosophy's Difference, Creation from No-One", and lastly, ID., *Genealogy of Nihilism: Philosophies of Nothing and the Difference of Theology*, Routledge, London - New York 2002.

147. PLANTINGA, *Knowledge of God...* cit., 40.

Most human beings think that at least one function or purpose of our cognitive faculties is to provide true belief; although we make mistakes, for the most part we are successful. However, naturalistic evolution, which is the conjunction of naturalism with the view that we and our cognitive faculties have arisen by way of mechanisms proposed by contemporary evolutionary theory, gives us reasons to doubt two things: (1) that a purpose of our cognitive systems is that of serving us with true beliefs, and (2) that they do, in fact, furnish us with mostly true beliefs¹⁴⁸.

The point is that survival has the ascendancy over truth, and whilst truth and survival may at times coincide, such coincidence is contingent. And this means that many of our most cherished beliefs have, according to those such as Dawkins, turned out to be patently false (what are memes, after all?). Moreover, many scientific views have themselves turned out to be erroneous, yet we have undoubtedly benefited from them. Falsehoods can be beneficial. Indeed does not society benefit from us accepting erroneous ideas like mind, existence, free will, ethics, and even objects (see below)? But we are told that none of these ideas are true. At the same time, however, we wouldn't fancy our chances crossing the road to pay a visit to our Darwinian lover without them. In short, truth is not about fitness enhancement¹⁴⁹. And any fiction that is useful is fair game for natural selection¹⁵⁰. As the Rolling Stones once sang, «you can't always get what you want, but you might just get what you need». As the saying goes, «In the kingdom of the blind, the one-eyed man is king». So in our case it would be, «In the land of the dead, that which mistakenly thinks it is alive, has sex and so breeds». If we recall the movie *The Matrix*, the deluded humans are pretty damn useful for the robots (read genes). But there, as with us, fitness does not track truth. Searle famously offered an argument against computers as mindful. While the content and rea-

148. ID., "An Evolutionary Argument Against Naturalism", in E. SCHMIDT RADCLIFFE – C. J. WHITE (eds.), *Faith in Theory and Practice: Essays on Justifying Religious Belief*, : Open court, Chicago - La Salle, IL 1993, 35-38.

149. See W. F. HARMS, "Adaptation and Moral Realism", in *Biology and Philosophy* 15, no. 5 (November 2000) 699-712, here at 707.

150. See R. JOYCE, "Moral Realism and Teleosemantics", in *Biology and Philosophy* 16, no. 5 (November 2001) 723-731, here at 730; and CUNNINGHAM, *Evolution: Darwin's ...* cit., Chapter Five.

son of the argument bear no relevance here, the principle at work does. The argument is usually referred to as Searle's Chinese Room: Imagine someone locked in a room, and this person does not understand any Chinese. In the room there are boxes in which there are Chinese symbols. In addition, there is a rulebook that instructs him how to respond to certain sets of symbols. He follows the rules and gives correct responses:

If I [the person in the Chinese room] do not understand Chinese on the basis of implementing a computer program for understanding Chinese, then neither does any other digital computer solely on that basis, because no digital computer has anything which I do not have¹⁵¹.

The point is that the man in the room has only a grasp of syntax, and not of semantics, for the latter requires an understanding of meaning and not just the application of rules. We agree because we believe in the existence of mind, but that is irrelevant here. Transferring Searle's argument to the question of what relation truth has with fitness, we can see that a syntactical grasp of Chinese is sufficient to get the job done. Moreover, a merely syntactical argument can go all the way down. In other words, there is no such thing as a semantical understanding of Chinese. We don't need it. Or, rather, natural selection does not need it. This being the case, Chinese is not about truth. There is no truth of Chinese but simply the occurrence of tasks, so to speak. Call this major task—SEX. Put differently, any road that leads to Rome does, by definition, get us there, even if we thought we were going to Belfast, and even if we in fact believe that Belfast is Rome (though that's pretty hard to do). After all, Columbus never thought that he had discovered America. He had, but that was beside the point. His belief was irrelevant. In this way, naturalism is the most syncretic, inclusive, and pluralistic of religions. It is not the case that any belief will do the job, however, but that any belief can do the job. And this is the case because, again, the intrinsic content of belief is irrelevant. Only its extrinsic relation to the major task — SEX— matters, as it were.

Advocates of naturalism such as Somers and Rosenberg argue that Darwinism is an example of metaphysical nihilism. In addition, however,

151. SEARLE, *The Mystery of Consciousness*, Granta Books, London 1997, 11.

they say it is also ethical nihilism. This means that morality is a complete fiction. But which Darwinian would argue that ethics, morality, etc have not been useful, that is, adaptive fictions or lies? Yet that gives support to Plantinga's argument regarding scepticism and naturalism¹⁵². Stroud too gives support to his argument, arguing that

A restrictive naturalist who holds that what mathematical statements assert is not part of the natural he believes in would have to explain our knowledge of logic and mathematics without himself appealing to any mathematics or logical facts at all¹⁵³.

But of course, any such ambition is foolish, to say the least, because we quite simply cannot think without logic or indeed mathematics¹⁵⁴. But the problem does not stop there, because as many have noted, naturalism is self-defeating. Stroud continues,

There is an embarrassing absurdity in [ontological naturalism] that is revealed as soon as the naturalist reflects and acknowledges that he believes his naturalistic theory of the world.... I mean he cannot say it and consistently regard what he says as true.

And this, as we know, also applies to universalized Darwinism¹⁵⁵. Thus, ultra-Darwinism and naturalism are like the proverbial drunk man on a moving train who appears to walk straighter than his fellow passengers. Thus as Plantinga says, «the argument isn't against the falsehood of naturalism, but for the irrationality of accepting it. The traditional theist, on the other hand, isn't forced into this appalling loop»¹⁵⁶. Moreover, materialism, physicalism, and so on, consist entirely in revealing the

152. See T. SOMMERS – A. ROSENBERG, “Darwin's Nihilistic Idea: Evolution and the Meaninglessness of Life”, *Biology and Philosophy* 18, no. 5 (November 2003) 653–668, here at 653.

153. STROUD, “The Charm of Naturalism...” cit., 32.

154. See *Ibid.*, 33.

155. *Ibid.*, 28. Also see, S. J. WAGNER, “Why Realism Can't Be Naturalized”, in WAGNER – R. WARNER (eds.) *Naturalism: A Critical Appraisal...* cit., 218; and J. HAUGHT, *Is Nature Enough?: Meaning and Truth in the Age of Science*, Cambridge University Press, Cambridge 2006, 18.

156. PLANTINGA, “An Evolutionary Argument Against Naturalism...” cit., 60.

many fictions we live by, including consciousness and a sense of self. And such fictions are surely adaptive. In this way, it is impossible to be a physicalist and stand opposed to Plantinga's argument. But then, if you are a consistent physicalist, unopposed to Plantinga's argument, then you would be in a rather self-defeating position, as you could not rationally trust or believe your belief in physicalism. As Stroud says, «If Plantinga and his friends convince others, there will be a general turn away from naturalism. That shows that it is naturalism that is now old hat»¹⁵⁷. And we certainly believe it is. For example, it is simply the case that we «cannot understand the world we live in without presupposing normativity»¹⁵⁸. But as said, normativity does not exist in the ontology presupposed by naturalism – when, that is, it is taken to be an ontological, as opposed to a methodological, theory. Nor, of course, does normativity exist in the world of ultra-Darwinism – how could it? Another notable contradiction that resides in the philosophy of naturalism is noted by Klapwijk, who points out that the naturalistic thesis «that the living world can be completely reduced to the physical world; the difference between both worlds is the hidden point of departure, its denial a theoretical amendment after the fact!»¹⁵⁹. In other words, naturalism trades on the very thing it denies. Moreover, it seems this lust for reduction is an almost fanatical desire for certainty, in this case the certainty of the grave. But in this case the grave lies above the ground. Those such as Baker try to remedy the situation by deflating naturalism's content to what she calls “quasi-naturalism”. The main difference is that quasi-naturalism honors the achievements of science, without making the claim that science is the only true source of knowledge, there being many such sources (for example, personal experience). And in conjunction with that openness is the way quasi-naturalism refrains from making a metaphysical claim about what there is. Or, rather, it does not say the natural world is all there is¹⁶⁰. And this seems eminently sensible, because ontological natu-

157. STROUD, “The Charm of Naturalism...” cit., 24.

158. BAKER, *The Metaphysics of Everyday Life: An Essay in Practical Realism*, Cambridge University Press, Cambridge 2007, 51.

159. J. KLAPWIJK, *Purpose in the Living World?: Creation and Emergent Evolution*, Cambridge University Press, Cambridge 2008, 158.

160. See BAKER, *The Metaphysics of Everyday Life...* cit., 87.

ralism cannot on its own terms identify, for example, what are called the *persistence conditions* for an object – that which an object requires to be what it is¹⁶¹. Naturalism, then, remains forever barred from such discernment because such conditions are necessary truths and so normative in a manner that resides outside naturalism's remit. For its ontology, not to mention its methodology, cannot cope with such non-empirical concepts. But as Baker points out, «the rationality of our attitudes and practices requires that we identify objects over time, and the only objects that we can identify are manifest objects, not collections of particles»¹⁶². But unfortunately (for the materialist), everyday objects seem to be an exotic wine beyond the purse of their ontology. Rather tellingly, Quine once compared the simple belief in objects to belief in the gods of Homer¹⁶³. Take the example of the Twin Towers. We of course think an atrocity was committed when they collapsed – but hold on a minute. Such tragedies come at an ontological price. If we believe that tragedies such as this one actually occur, our philosophies cannot be miserly. The problem with restrictive naturalism is that baby, water, and bath disappear over the fence. If “we” advocate eliminativism, then it is, quite frankly, impossible for the Twin Towers tragedy to have occurred. And that is because the ontological inventory attached to this philosophy does not include objects such as towers, not to mention people. Or to use another example, imagine two cars driving at great speeds, crashing into each other head-on. All we are entitled to say is that two carwise-shaped combinations of particles now form another combination, one that we might call accidentwise; but of course, any such combinations we pick out are, in the end, arbitrary¹⁶⁴. In short, nothing real actually happened, just as now the idea of a wound is impossible (arrangements do not really exist, they are not true objects)¹⁶⁵. Terms such as accident, tower, person, and so on, are not referring terms. Consequently, all we can speak about legitimately, if we can be bothered to speak at all, are particles now arranged otherwise.

161. See REA, *World Without Design...* cit.

162. BAKER, *The Metaphysics of Everyday Life...* cit., 6.

163. See QUINE, “Two Dogmas of Empiricism”, in ID., *From a Logical Point of View: Nine Logico-Philosophical Essays*, Harper and Row, New York 1951, 44.

164. See BAKER, *The Metaphysics of Everyday Life...* cit., 7.

165. See *Ibid.*, 27.

But of course even that will not do, for our speech is, likewise, simply an arrangement of air and not itself a referring term. We might think this is an outrageous philosophy, but to be fair it is the most consistent position that falls under the umbrella term “naturalism”. And even if we appeal to a weaker philosophical version of naturalism, such as reductionism, the situation is not much better, for again all we can say is that the term “tower” is just a description we give to the mereological sums of particles. And such descriptions merely reflect our interests – they are parochial colloquialisms, quaint primitive stories we tell each other at the fireplace. They are not, therefore, ontological, for reality does not reflect our interests. We need to move to a non-reductionist position if we are to believe that the Twin Towers tragedy actually happened, but this is not an easy thing for naturalism to do without begging the question. A non-reductionist position will say the towers did in fact exist and that now they no longer do – therefore the Twin Towers collapsed. Yes, they were composed of particles, but they were not identical to those particles¹⁶⁶. And the same stands for the unfortunate people in the car crash: yes, they were made from atoms, but they were not identical to those atoms. And this should not surprise us really, for our bodies are always changing, and we are not therefore identical to any set of materials that at some point in time make up our bodies. Therefore, to believe in people, cancer, violence, or tragic events (not to mention sex, marriage, death, and life) we need to have a more interesting ontology, one that allows for a variety of primitive kinds. That is, the ontology must allow for kinds with different persistence conditions – conditions that are necessary for something to actually be or remain what it is. As Baker puts it:

An object *x* has *K* as its primary kind only if: *X* is of kind *K* every moment of its existence and could not fail to be of kind *K* and continue to exist. Something that has *K* as its primary kind cannot lose the property of being a *K* without going out of existence altogether¹⁶⁷.

166. See *Ibid.*, 26.

167. *Ibid.*, 35.

According to Baker, a person is a primary kind, whilst a “human animal” is one’s body’s primary kind. And in this way such a body is a human animal nonderivatively, and a person derivatively. Our primary kind is to be a person, whilst our body’s is that of being a human animal; and a body only becomes related to a person contingently insofar as it constitutes you¹⁶⁸. Now, what distinguishes a person as a primary kind is the existence of a first-person perspective, whilst the human animal or the body only has a third-person perspective. The persistence conditions of a person therefore entail a first-person perspective. And it is this difference that means that a person cannot be identified with their body. As Lowe says, «It is impossible to identify a living organism with the mass of matter that constitutes it at any given stage of its existence, for it is constituted by different masses at different stages»¹⁶⁹. Moreover, «no objectifying inquiry can reveal what persons are or who the persons are among things in the world»¹⁷⁰. For the notion of a person is beyond the ken of science and of all objective modes of thinking, for the simple reason that a person is not an object. And just because science cannot identify persons is no reason to deny their existence, as that is just begging the question. Indeed, if a philosophy jettisons a first-person perspective, they are no longer talking about people but, maybe, about bodies – if, that is, such a philosophy can even accommodate bodies. Crucially, first-person perspectives cannot be duplicated. They are irreducibly singular¹⁷¹. Consequently, it does not matter out of what ‘stuff’ a person is made, as that is merely a contingent relation. What is necessary is the existence of the first-person perspective. There is, so to speak, no game to be played until this emerges. Moreover, as Baker points out, «First-person perspectives do not appear to be biologically significant... [but] first-person perspectives are ontological significant»¹⁷². The point is that if we only appeal to Darwinism, as naturalists must, in this regard, we will seek in vain to find

168. See *Ibid.*, 38. «The self is what it is, and not another thing», (LOWE, *Subjects of Experience...* cit., 51). Also, see LOWE, *An Introduction to the Philosophy of Mind*, Cambridge University Press, Cambridge 2000, 16–18.

169. ID., *The Four Category Ontology: A Metaphysical Foundation for Natural Science*, Oxford University Press, Oxford 2006, 7.

170. VAN FRAASSEN, *The Empirical Stance...* cit., 191.

171. See BAKER, *The Metaphysics of Everyday Life...* cit., 69.

172. *Ibid.*, 70.

a person. But that is only a problem, as we know, for those who seek to make Darwinism a universal philosophy rather than a brilliant piece of science. Indeed we will not find a person in science either, but again this is only a problem for those who have venerated science out of all proportion, placing it in a thoroughly unscientific place.

Naturalism is also self-defeating in its slavish following of science and its rejection of all things metaphysical. As Lowe points out,

without a coherent general concept of the whole of reality, we cannot hope to render compatible the theories and observations of the various different sciences: and providing that conception is not the task of one of those sciences, but rather that of metaphysics¹⁷³.

Moreover, any arguments given in opposing metaphysics seem to be employing the very thing that they are denying, for they are inevitably making metaphysical claims¹⁷⁴. For example, it is self-defeating to assert that philosophy must relinquish its claim to formulate a First Philosophy, and that it should instead be subservient to science, since science allegedly provides the best account of reality. Such an assertion is self-defeating because it is, quite obviously, not a scientific claim but rather a metaphysical one. As Lowe says,

science only aims to establish what does in fact exist, given the empirical evidence available to us. It does not and cannot purport to tell us what could or could not exist, much less what must exist, for these are matters which go beyond the scope of any empirical evidence¹⁷⁵.

In addition, science cannot tell us why something does exist (what makes its existence possible, whether that something be a carrot or

173. LOWE, *An Introduction to the Philosophy* ... cit., 4.

174. See *Ibid.*, 4; Also, see O. BLANCHETTE, *Philosophy of Being: A Reconstructive Essay in Metaphysics*, Catholic University of America Press, Washington, D. C. 2003.

175. LOWE, *An Introduction to the Philosophy* ... cit., 5. Also see ID., *Four Category Ontology*... cit.

mathematics). Even less can it tell us why anything at all exists. Lowe continues,

It would be a complete abdication of philosophical responsibility for a philosopher to adopt the metaphysical outlook of some group of scientists just out of deference to their importance as scientists.

This temptation to abdicate arises, it seems, because naturalists believe in the myth of a physicist's paradise¹⁷⁶. But as we know from above, and as Kanzia makes clear,

while physicalists refer to physics (they believe in physics), there is no serious physicist who is looking for the ultimate world formula, the physical principles of all other sciences, the reducibility of all true sentences to a physical language, etc. Serious physicists are no physicalists. They even deny what physicalism asserts¹⁷⁷.

Another source of this seductive temptation to abdicate philosophical responsibility stems from a particular embarrassment, namely, the very possibility of philosophy itself: from where does it issue, or where does it reside, as it were? Naturalism finds it very difficult to accommodate philosophy at all, just as it finds it extremely difficult to naturalize itself. In other words, naturalism cannot itself be naturalized. For if naturalism were, in a sense, true, then it would never be spoken of. That is, it would not be formulated in the way it is. In short, it would not be a philosophical position at all¹⁷⁸. But, to be honest, that's a very difficult task. Naturalism is in a similar position to ultra-Darwinism: their posture as universal theories causes them to eat their own discourse, so to speak. And they therefore become like racing driver who, to avoid friction, chooses tires that are so smooth they offer no resistance, which in turn causes the driver to remain at a standstill, unable to move. Likewise, if Darwinism

176. See CH. KANZIAN, "Naturalism, Physicalism and some Notes on 'Analytical Philosophy': Comment on van Inwagen's Paper", in CORRADINI – GALVAN – LOWE (eds.), *Analytic Philosophy Without Naturalism...* cit., 90.

177. *Ibid.*, 92.

178. «One thing that seems not to have been naturalized is naturalism itself», (STROUD, "The Charm of Naturalism...", cit., 22).

dissolves other discourses it comes to a standstill itself. And naturalism's dissolution of philosophy leaves it in a similar place, for its sycophantic relation to science renders it devoid of rationality. But thankfully, as Lowe points out, 'We cannot rationally believe that we lack freedom of rational action'¹⁷⁹.

8. CONCLUSION: PERSONS, NATURALLY

Robert Spaemann argues that

Persons are not something else the world contains, over and above inanimate objects, plants, animals, and human beings. But human beings are connected to everything else the world contains at a deeper level than other things to each other. This is what it means to say there are persons¹⁸⁰.

And this type of connection is reflected in the notion of common ancestry, but only accurately when the Patristic notion of recapitulation (*anakephalaiōsis*) is included. And it should be noted that, before the fashionable despisers of humans tell us that such a view is pompous and self-serving, what in fact is special about man's place in the world is precisely his relation with the rest of nature. As St Gregory Nyssa says,

There is nothing remarkable in Man's being the image and likeness of the universe, for earth passes away, and the heavens change.... [I]n thinking we exalt human nature by this grandiose name (microcosm, synthesis of the universe) we forget that we are thus favouring it with the qualities of gnats and mice¹⁸¹.

Indeed, as St Maximus the Confessor tells us,

179. LOWE, "Rational Selves and Freedom of Action", in CORRADINI – GALVAN – LOWE (eds.), *Analytic Philosophy Without Naturalism...* cit., 177.

180. SPAEMANN, *Persons...* cit., p. 4.

181. St. Gregory of Nyssa, quoted in A. V. NESTERUK, *Universe As Communion: Towards a Neo-patristic Synthesis of Theology and Science*, T & T Clark, London 2008, 174.

man was introduced last among existent things, as the natural bond mediating between the extremes of the whole through his own parts, and bringing into unity in his own person those things which are by nature distant from each other¹⁸².

In other words, persons naturalise nature, which is to say they actualise nature. They reveal nature to itself, doing so in all its forms, colours, and structures, for without them all is dark, or at least shadow. Thus they do not flee nature, as do the philosophical naturalists who destroy all that is natural. Moreover, Lowe is surely correct when he argues that

Selves as persons are not created through biological processes but rather through socio-cultural forces, that is, through the cooperative efforts of other selves or persons. Persons create persons, quite literally¹⁸³.

And this seems to be correct. But one should not read such creation in a purely cultural manner, for that can lead to a damaging sense of nominalism. In thinking something is a product of culture, in other words, we tend to presume that this means it is not truly real. But no, culture is itself an emergent phenomenon, with its own modes of causality¹⁸⁴. More importantly, if persons only come from persons, then it is for this reason that God, according to Christianity, is a personal, indeed the arche person. Jacques Maritain echoes this:

How can it be that I am born? It is the certitude of being born common to all men, which suppresses in us the blossoming – There is only one solution: I have always existed, this I who thinks; but not in myself... nor in some impersonal life. Where, then? It must have been in a being of transcendent personality¹⁸⁵.

182. MAXIMUS THE CONFESSOR, *Ambigua*, 41.

183. LOWE, *Subjects of Experience*... cit., 48.

184. See CUNNINGHAM, *Evolution: Darwin's ...* cit., Chapter Five.

185. J. MARITAIN, *Approaches de Dieu*, Alsatia, Paris 1953, 83–86.

Henry makes the same point when he says, «More original than the truth of Being is the truth of man»¹⁸⁶. And of course the more we are repulsed by the apparent anthropocentrism of this, the more anthropocentric we are. For, according to Henry, Man's truth, insofar as Man is, is the Incarnation¹⁸⁷. Inspired by such insight, Henry argues that there is no birth in the world. He says, «In the world, according to Christianity, no birth is possible»¹⁸⁸. Indeed Christ prohibits the “natural attitude” to birth: «Do not call anyone on earth Father, for you have one Father, he in Heaven» (Mat 23.9). Now, this may seem to some (including religious people) to be only metaphorical. But it is here that our preceding analysis of both materialism and naturalism reveal their worth, for if we search the “purely” natural world for an actual birth of a person, we will not find one. Alas, we cannot even find a person, no matter their birth. Thus these ostensibly atheistic philosophical positions are in the end servants of the truth, that is, of theology. They are servants of theology insofar as what they take to be negative findings can be read, instead, as iconic revelations of creation *ex nihilo*, which is to say, the nothingness they strive to find. And this is the case only because what is presented in nature declares the dependence of all upon their very source. Like Darwinism – which as Aubrey More pointed out, came in the guise of a foe but did the work of friend – the bid to capture nature has returned us to the font of subjectivity, to the sacramentality of each and every day. Therefore such philosophies, despite their apparent hate of religion, are indeed handmaidens to theology: *Scientia est ancilla vitae*.

*'The miracle is the only thing that happens, but to you it will
not be apparent,
Until all events have been studied and nothing happens that you
cannot explain'*

W. H. Auden, *For the Time Being, Recitative*

186. HENRY, *The Essence of Manifestation*, trans. G. ETZKORN, Martinus Nijhoff, The Hague 1973, 41.

187. See CUNNINGHAM, *Evolution: Darwin's ...* cit., Chapter Seven.

188. HENRY, *I am the Truth...* cit., 59.

SOMMARI

Esiste un rapporto tra scienza e religione: la prima è figlia, anche se non diretta, della seconda, dal momento che proprio la religione monoteistica ha permesso l'esistenza di un mondo secolare, un mondo che può essere studiato. Quando materialismo e naturalismo tendono a diventare una filosofia universale, si trasformano in distorsioni della scienza stessa. In quanto riduzioni della scienza, essi mostrano di avere incoerenze e contraddizioni interne: il naturalismo pretende di ridurre il mondo vivente a mondo fisico, a partire dall'idea che tutto possa essere spiegato *naturalmente*, senza riuscire ad indicare esaurientemente cosa si intenda per natura. Il materialismo finge che il provvisorio sia definitivo, pretendendo così di essere una teoria cogente ma rivelando di essere invece soltanto un punto di vista ideologico: "materia è tutto ciò che è". Il punto critico del materialismo e del naturalismo consiste nel fatto che essi non riescono a rendere ragione della persona. La prospettiva della "prima persona" viene proposta come via per superare le secche del riduzionismo scienziato.

There exists a relationship between science and religion: the first one is the daughter, even if it is not direct of the second, from the moment that one's own monotheistic religion permitted the existence of a secular world, a world that can be studied. When materialism and naturalism tend to become a universal philosophy, they transform themselves into distortions of the science itself. In as much as reductions of science, these show to have internal incoherencies and contradictions: naturalism professes to reduce the living world to a physical world, starting from the idea that everything can be explained naturally, without managing exhausting to indicate what is intended by nature. Materialism fakes that the provisory is definite, while pretending in this way to be an obligatory theory but while revealing being instead as only an ideological point of view: "matter is all that which is". The critical point of materialism and of naturalism consists in the fact that these do not manage to give reason to the person. The prospective of "first person" come proposed as the way to exceed the shallows of scientific reductionism.

Il existe un rapport entre science et religion: la première est fille, bien que non directe, de la seconde, à partir du moment où la religion monothéiste a permis l'existence d'un monde séculier, un monde qui peut être étudié. Quand le matérialisme et le naturalisme tendent à devenir une

philosophie universelle, ils se transforment en distorsions de la science même. Comme réductions de la science, ils manifestent des incohérences et des contradictions internes: le naturalisme prétend réduire le monde vivant au monde physique, à partir de l'idée que tout peut être expliqué *naturellement*, sans réussir à indiquer d'une manière exhaustive ce qu'il entend par nature. Le matérialisme feint que le provisoire soit définitif, en prétendant ainsi être une théorie coactive. Mais, au contraire, il s'avère être seulement un point de vue idéologique "la matière est tout ce qui est". Le point de critique du matérialisme et du naturalisme consiste dans le fait que ces derniers ne réussissent pas à rendre compte de la personne. La perspective de "première personne" se propose comme une voie pour dépasser les voies arides du réductionnisme scientifique.

Hay una relación entre ciencia y religión: la primera es hija, aunque no directa, de la segunda. La religión monoteísta ha permitido la existencia de un mundo secular, un mundo investigable, cuando el materialismo y el naturalismo se convierten en filosofía universal, se convierten en distorsión de la ciencia misma. Muestran su propias incoherencias y contradicciones internas: el naturalismo pretende reducir el mundo viviente a sólo físico, sin lograr una explicación desde la sola naturaleza de cuanto existe. El materialismo finge como definitivo lo provisorio, pretendiendo ser una teoría coherente pero revelándose sólo como una ideología: "no hay más que materia". El punto crítico del materialismo y del naturalismo consiste en que no logran explicar la persona. La perspectiva de la primera persona es una propuesta para superar los errores del reduccionismo científico.

Existe uma relação entre ciência e religião: a primeira é filha, mesmo se não direta, da segunda, a partir do momento que a religião monoteísta permitiu a existência de um mundo secular, um mundo que pode ser estudado. Quando o materialismo e o naturalismo tendem a torna-se uma filosofia universal, se transformam em distorções da ciência mesma. Enquanto redução da ciência, esses mostram de haver incoerências e contradições internas: o naturalismo pretende reduzir o mundo vivente ao mundo físico, partindo da idéia que tudo pode ser explicado naturalmente, sem conseguir indicar de modo exaurível que coisa se entenda por natureza. O materialismo finge que o provisório seja definitivo, pretendendo assim de ser uma teoria cogente, mas revelando de ser, ao invés,

somente um ponto de vista ideológico: “matéria é tudo aquilo que é”. O ponto crítico do materialismo e do naturalismo consiste no fato que esses não conseguem dar razões acerca da pessoa. A prospectiva da “primeira pessoa” vem proposta como via para superar as lacunas do reducionismo cientista.

Physics, Creation and the Trinity

SIMON OLIVER *

The Christian theologians of the first centuries of the Church were inheritors of three very different understandings of creation: the Greek myth of the fabrication of the universe (Plato's *Timaeus*), Aristotle's view that the cosmos is of everlasting time, and the Hebraic teaching that God creates from nothing in sovereign freedom. While recognising the drama of Plato's cosmology and the inherent rationality of Aristotle's position, nevertheless a clear consensus emerged that God creates *ex nihilo*, even if this doctrine is not stated so succinctly in the pages of scripture¹. More recently, the Christian doctrine of creation has also been set alongside modern scientific cosmology, and particularly the so-called "Big Bang" theory which was first proposed by the Belgian priest Georges Lemaître in the 1930s².

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1. The standard treatment of the history of the doctrine of creation *ex nihilo* is G. MAY, *Creatio ex nihilo: the doctrine of "creation out of nothing" in early Christian thought*, trans. A. S. WORRALL, T&T Clark, Edinburgh 1994.
2. See, for example, P. COPAN – W. L. CRAIG, *Creation our of Nothing: A Biblical, Philosophical and Scientific Exploration*, Baker Academic, Grand Rapids, MI 2004, 17-19 et passim. The term "Big Bang" was coined by the Cambridge physicist Fred Hoyle who opposed Lemaître's theory in favour of a "steady-state" cosmology. Of course, Lemaître's equally important contribution, first proposed in the 1920s, is the notion that the universe is expanding.

Does Big Bang cosmology confirm the doctrine of creation *ex nihilo* and the teaching that “in the beginning, God created the heavens and the earth”? Numerous cosmologists seem to interpret Big Bang cosmology in a way which precludes the notion of creation and a creator. For example, some account for the Big Bang in terms of a fluctuation in a primal vacuum known as “quantum tunnelling” from nothing, from which the universe expanded according to what is known as inflation theory. “Nothing” is defined by the cosmologist Alexander Vilenkin as a state with no classical space-time in which the basic categories of physics – space, time, energy, entropy, and so on – seem to lose their meaning. This utterly uncaused emergence of the universe from nothing apparently accounts for the universe’s existence without reference to anything beyond the universe itself³. The universe is simply a brute fact.

There are very good reasons for supposing that Big Bang cosmology is not equivalent to the Christian doctrine of creation *ex nihilo*. In particular, it seems that natural science cannot truly think the *nihil*. Scientific cosmology still operates with the Aristotelian notion that *ex nihilo, nihil fit*. The vacuum of modern particle physics which fluctuates to bring the universe to existence through so-called quantum tunnelling is not “nothing”, for this “nothing” is apparently subject to fluctuation. Even attempts by mathematical physicists to identify “nothing” with the empty mathematical set fail because, as William Carroll points out, «the empty mathematical set...is subject to the principles of logic and to the laws of quantum cosmology and, as such, cannot be identified with absolute nothing»⁴. Joseph Yciski puts it succinctly thus:

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3. See A. VILENKIN, “Creation of Universes from Nothing”, in *Physical Letters* 117B:25, cited in M. W. WORTHING, *God, Creation and Contemporary Physics*, Fortress Press, Minneapolis 1996, 98-100. See also VILENKIN, “Boundary Conditions in Quantum Cosmology”, in *Physical Review D* 33:12 (1986) 3560-3569; ID., “Birth of Inflationary Universes”, in *Physical Review D* 27:12 (1983) 2848-2855, A. GUTH, *The Inflationary Universe: The Quest for a New Theory of Cosmic Origins*, Perseus Books, U.S. 1997 and C. J. ISHAM, “Creation of the Universe as a Quantum Process” in R. J. RUSSELL – W. R. STOEGER – G. V. COYNE (eds.), *Physics, Philosophy and Theology: A Common Quest for Understanding*, Vatican Observatory Foundation, Vatican City State 2005 edn., 375-408.
 4. W. CARROLL, “Cosmology” available at http://www2.nd.edu/Departments//Maritain/ti/carroll.htm#N_12_ [accessed 1st June 2006].

The alleged nothing [discussed in contemporary cosmology by Hawking and others] turns out to be a complex reality of ordering principles without which there would be no uniformity in nature and no scientific study of natural phenomena would be possible⁵.

Contemporary cosmological speculation seems magically to reify the *nihil*.

Whereas those who first formulated the doctrine of creation *ex nihilo* had to attend to the ancient Greek understanding of a universe that has no temporal beginning, so we must likewise attend to the tendency to reify the *nihil* and the consequent difficulty of speaking of God's act of creation from nothing. How are we to express the utterly unique instance of the divine creative act, and so distinguish God's act of creation from any natural process or human contrivance, so maintaining the radical nature of the doctrine of creation shared by the ancient Abrahamic faiths?

In order to articulate the radical nature of *ex nihilo* and avoid any tendency towards understanding creation as in any way univocal with natural processes or human contrivances, I would like to consider the doctrine of creation *ex nihilo* with reference primarily to the doctrine of God. I will begin in the thirteenth century with St. Thomas Aquinas and the way in which he distinguishes between God's act of creation from nothing and the subsequent nature of the universe, namely through the category of motion. Creation is not, strictly speaking, a motion, whereas nature is understood by Aquinas in Aristotelian fashion as a principle of motion and rest.

I will offer a brief examination of Aquinas's understanding of motion. I will then discuss the notion of creation as 'emanation' before examining God's relation to a cosmos saturated with motion. This will present us with the a question. If we are to claim that a study of nature involves, in the end, a study of motion, and creation *ex nihilo* does not fall into this category of motion (that is, it is not a natural process), are we establishing

5. J. YCISKI, "Metaphysics and Epistemology in Stephen Hawking's Theory of the Creation of the Universe", in *Zygon* 31(2) (1996) 272, cited in CARROLL, "Thomas Aquinas and Big Bang ..." cit.

a division between the natural sciences on the one hand, and theology on the other? Is theology defined as that discourse about the motionless, divine origin of the universe, whereas the natural sciences are concerned with only with motion, that is, natural processes which are, of necessity, absent from the divine?

I will attempt a tentative answer to that question by describing the way in which, for Thomas, motion is analogically related to the eternal dynamism of the Trinity. I will describe Aquinas's understanding of creation as a "motion" of emanation from God before considering emanation within created beings and its relation to the eternal emanation of the persons of the Trinity. We will see that, in the dynamism of the Holy Spirit proceeding from the Father and Son, we find the principle of natural motion. Motion, then, is not the wedge between creation and creator, but the means of creation's participation in the divine.

Having considered motion in relation to the divine processions, creation and emanation, I will turn to address the development of ideas latent in Aquinas's view by Hans Urs von Balthasar, referring particularly to Trinitarian theology, the ontology of love and the structure of motion. I will suggest that Balthasar's emphasis on difference within the Trinity as the structure of love implies that motion, which, in its Platonic, Aristotelian and Thomist guise, requires difference, is also structured as a kind of kenotic self-donation.

In concluding this essay, and in order to draw attention to the crucial place of the Trinity in thinking about the true nature of creation *ex nihilo*, I will examine the thought of Isaac Newton, the principle theorist of motion in early modern science, to suggest why his voluntarist, Arian and Unitarian theology prevented him from truly articulating the radical edge of the traditional Christian doctrine of creation. We will see that Newton's doctrine of God and understanding of motion paves the way for the separation of faith and reason, and therefore the separation of theological cosmology from the speculations of the natural sciences.

1. AQUINAS: CREATION AND EMANATION

Aquinas is frequently reluctant to describe God's act of creation as any kind of "motion". Why? To answer this question, we need to understand

how Aquinas understands motion, which for us post-Newtonians seems to be a simple category belonging to physics with little, if anything, to do with theology or metaphysics.

Aquinas gleans much of his understanding from Aristotle. For Aristotle and his successors, motion – *kinesis* – is a mysterious and broad category which encompasses not only local motion of bodies through space, but also the changes of, for example, growing, learning or thinking. These different varieties of motion are analysed by means of the categories which are fundamental to Aristotle’s metaphysics, most particularly potency and act. At a general level, motion is passage from potency to act, and therefore the means of the actualisation, or perfection, of creatures. A student, for example, is potentially knowledgeable concerning the history of Italy, and, by the motion of learning, becomes actually knowledgeable concerning the history of Italy. Aristotle identifies motion as «the actualization of what potentially is, *qua* potentiality»⁶.

As far as Aristotle is concerned, every motion must be caused by something which is, in some sense, in act with regard to the motion concerned. For example, for something to move from cold to hot, it must be moved by something which is actually hot. In other words, there is always something that is moved, and – in the end – there is always a mover. This is also why Aristotle maintains his motor-causality principle which is so central to later mediaeval natural philosophy: *omne quod movetur ab alio movetur* (“whatever is moved is moved by another”). Any motion can always be analysed into the mover and that which is moved. So, for Aristotle, motion is always relational⁷.

Given an Aristotelian definition of motion which has at its heart the passage from potency to act and the postulation of a subject which preceded the motion, it is not surprising that Aquinas frequently avoids describing God’s act of creation *ex nihilo* as any kind of “mo-

6. ARISTOTLE, *Physics*, III.1.201a. On this definition of motion, see L. A. KOSMAN, “Aristotle’s Definition of Motion”, in *Phronesis* 14 (1969) 40–62.

7. For a more detailed discussion of motion and the interpretation of the principle *omne quod movetur ab alio movetur*, see S. OLIVER, *Philosophy, God and Motion*, Routledge, London 2005, especially chs 2 and 4, and J. WEISHEIPL, *Nature and Motion in the Middle Ages*, W. E. CARROLL (ed.), The Catholic University of America Press, Washington, D.C. 1985.

tion". However, on other occasions Aquinas stretches his use of the term *motus* in such a way that it can be employed at least metaphorically, but without error, of the divine creative act and even of God's immanent and perfectly subsistent intellective life⁸. How can this be so? It is necessary to begin with an examination of the character of emanation, for (as many commentators neglect to mention) Aquinas refers to creation as «the emanation of things from the first principle»⁹.

It is important to recall at this stage that emanation is a term with a very complex history. It is deployed in numerous ways in ancient pagan and Christian thought, particularly within the Neoplatonic tradition. What Aquinas means by this term is certainly not what Peter Lombard still maintained a century earlier, namely that created natures emerge from God in a hierarchy in such a way that creatures are created by those immediately above them in that hierarchy. Neither does emanation refer to a necessary emergence of creation from the Godhead. Emanation, for Aquinas, concerns self-expression. It refers to the active self-expression of a nature in relation to others in the production of another self. In the *Summa Contra Gentiles* he begins by noting that «one finds a diverse manner of emanation in things, and, the higher a nature is, the more intimate to the nature is that which flows from it»¹⁰. What does this mean? Take a fire, for example. A fire necessarily emanates a likeness of itself and so moves another object from cold to hot. This emanation terminates outside the mover, in the heating of another object.

For Aquinas, however, the highest form of emanation is not that which terminates externally from the being concerned (for example, an inanimate object locally moving another object) but that which has an internal termination, for this implies an increasing degree of self-subsistence. We find a clear instance of emanation and return in the human intellect, for the intellect is capable of self-knowledge and understanding.

8. For example, see AQUINAS, *Summa Contra Gentiles*, I.13.10. See also ID., *Summa Theologiae*, 1a.19.1.ad 3 on the entirely subsistent movement of the divine will. Hereafter, these works are cited as 'SCG' and 'ST' respectively.

9. ID., *ST*, 1a.45: *De modo emanationis rerum a primo principio*. For a discussion of divine emanation and motion in relation to Aquinas's understanding of the perfections of being, life and knowing, see R. A. TE VELDE, *Participation and Substantiality in Thomas Aquinas*, E. J. Brill, Leiden 1995, 272-279.

10. AQUINAS, *SCG*... cit., IV.11.1.

Thus a human being is able to produce a communication of its nature, an emanation of another self, in such a way that *self*-reflection is possible. When we reflect on or think about ourselves, it is as if a version of ourselves emanates from our intellect in such a way that we can, as it were, “look” at ourselves. Yet the human intellect is imperfect because it must take its first knowledge – even of itself – from without, namely through sense perception, before returning from the external object to arrive at knowledge of itself by its relation to the external object in question¹¹. I know myself not through myself, but in my relation to external objects. I know myself, for example, as sat behind this desk.

Perfect emanation is found in God whose intellect and act of understanding are identical with his being. Therefore, God’s being, intellect and understanding are one¹². For the divine to know himself and express himself through that knowledge is the divine essence, the very divine life itself. Aquinas goes on to maintain that God’s self-knowledge, although perfect, unitary and eternal, still maintains distinction. This distinction consists in the God who expresses his self-knowledge in himself and the God who is expressed or conceived, namely the Son who is the expression of the self-knowledge of the Father. The former is a perfect emanation of the latter in such a way that the being of both is identical and this emanation remains entirely immanent¹³.

As well as God’s knowledge of himself through himself, Aquinas elsewhere outlines the sense in which ideas subsist in the divine mind and are therefore known by him¹⁴. He claims that these ideas are forms of things existing apart from things, and that the form of a thing can either be the exemplar or pattern of the thing whose form it is said to be, or it can be the means of knowing the thing whose form it is by its residing in the knower. In both these aspects ideas subsist in the mind of God. Yet as regards the latter, it can be seen that it is by God’s interior self-knowledge, namely the emanation of the Son from the Father, that he knows other things by their proper ideas subsisting in him. In a sense, therefore, all things are known primarily and *per se* as they exist most

11. See *Ibid.*, II. 60.

12. See *Ibid.*, I.45.

13. On the difference between divine and human self-understanding, see *Ibid.*, IV.11.11.

14. *Id.*, *ST...* cit., 1a.15.1.

perfectly in God's knowledge, and as they are therefore known in God's self-knowledge, in God's interior emanation.

Aquinas also describes the place of the Spirit within the divine emanations and creative act¹⁵. He seeks to make clear what we must understand of the Spirit with regard to God's immanent life and act of creation. Initially, Aquinas examines intellectual natures in general and states that there must be a will alongside intellect because such a nature must *desire* to know¹⁶. Crucially, intellects are not merely passive recipients of 'information'; all knowledge is at once *willed* or *desired* knowledge. Just as any natural thing has an inclination to its own proper operations, for "it tends to what is fitting (*convenientia*) for itself", so too an intellectual nature has an inclination, which we call will, towards its own proper operation in knowledge¹⁷. Aquinas claims that, of all the acts which belong to the will, love (*amor*) is found to be a principle and common root. He describes this in terms of the "affinity and correspondence" (*affinitatem et convenientiam*) between the principle of inclination in natural things and that to which they are moved. Thus, for example, if I am stood before a beautiful painting in one of Rome's magnificent churches a "species" or "likeness" of the painting comes to reside in my mind. Meanwhile, the painting comes to reside in my will because there is a certain "proportion and suitability" – a *convenientia* – between myself and the painting. My love of, or desire for, the painting draws me to knowledge of the painting. The *convenientia* between my intellect and will on the one hand, and the painting on the other, becomes the principle behind my intellectual nature's self-motion towards knowledge of the object, that motive attraction being a form of love.

However, in contrast to intellectual beings such as angels or humans, God is at one with his intellectual nature and, likewise, his will. The first and most appropriate object of the operation of the divine will – the object of God's desire – is the divine goodness, and so God, because God loves himself and is beloved and lover, must be in his will as the beloved is in the lover¹⁸. The beloved is in the will of the lover by means of a

15. *Id.*, SCG... cit., IV.15ff.

16. *Ibid.*, IV.19.1ff.

17. *Ibid.*, IV.19.2.

18. *Ibid.*, IV.19.7.

‘proportion and suitability’ between the two. God has a most perfect proportion and suitability with himself because he is simple. Therefore, God is in his will with perfect simplicity. In addition, any act of will is, as Aquinas remarks, an act of love, but the act of the will is the divine being. So “the being of God in his will by way of love is not an accidental one – as it is in us – but is essential being”, hence the scriptural teaching that “God is love”¹⁹.

Coupled with what has been said of God’s self-knowledge in the emanation of the Son, we now have a two-fold picture of the divine life. On the one hand, God loves himself because, as we have seen, the “proportionate and appropriate” end of God’s operative will is himself and his own goodness. Yet this would not be loved if it were not known, and God knows himself through conceiving of himself in the eternal emanation of the Word. Yet it is not quite adequate to say that it is God’s knowledge which is beloved, for God’s knowledge is his essence. Therefore, coupled to the emanation of the Word must be a love whereby the lover dwells in the beloved, both in God’s knowing and in that which is known. The love by which God is in the divine will as a lover in the beloved ‘proceeds both from the Word of God and the God whose Word he is’²⁰. It is the Holy Spirit. It is as if the Father is the lover and the Son the beloved, but immediately and in eternity this is returned so the Son is the lover and the Father the beloved. This introduces a kind of circular dynamism to the inner divine life which Aquinas refers to as a kind of intellectual “motion”²¹.

With regard to God’s self-knowledge and self-love in the persons of the Trinity, we now have a flickering sense of how the universe can be said to have the divine nature as its cause. Aquinas states that «effects pre-exist in a cause according to its mode of being. Since, then, God’s being is his actual understanding, creatures pre-exist there as held in his mind...»²². Thus he states «God’s knowledge stands to all created things as the artist’s to his products»²³. However, in addition to the knowledge

19. *Ibid.*; I John 4.16.

20. *Ibid.*, IV.19.8.

21. *Ibid.*, IV.19.12.

22. *Id.*, *ST...* cit., 1a.19.4.responsio.

23. *Ibid.*, 1a.14.8.responsio.

of things, Aquinas also notes that an act of will is necessary in the act of creating: creation *ex nihilo* is not a necessary emanation. God is so inclined because his own subsistent goodness wills that other things be in such a way that “by his will he produces things in being” and his self-love thereby becomes the cause of the creation of things²⁴. In a similar fashion Aquinas elsewhere states that

It is... from the fact that the Holy Spirit proceeds by way of love – and love has a kind of driving and moving force – that the movement which is from God in things seems properly to be attributed to the Holy Spirit²⁵.

It seems, therefore, that God’s knowledge becomes the cause of creation and the ground of the continual subsistence of the cosmos, while the Holy Spirit, which proceeds from the Father and Son by way of love, is properly described as the principle of the motion of nature²⁶. This means that what moves all things to their characteristic operation is love, namely a desire for fulfilment in the beloved, a desire for fulfilment in God.

In what sense can this emanation and return to self in God be described as any kind of motion? In answer, Aquinas begins by stating that there are two kinds of action²⁷. The first is that which passes to matter outside the agent concerned, for example locally moving another body or the heating of one body by another. The second is that which remains in the agent, for example understanding, sensing or willing. In the case of the first, the motion is completed not in the agent of the motion, but in another. In the second, the motion is the completion or perfection of the agent of the motion. However, this latter is not motion in the strict Aristotelian sense of the passage from contrary to contrary or the actualising of the potential *qua* potential. In Aristotelian terms, it may be regarded as *energeia* (actuality), a kind of constant similar to seeing which is not temporally divisible into parts. It is an activity which, at every moment,

24. *Id.*, *SCG...* cit., IV.19.12.

25. *Ibid.*, IV..20.3.

26. *Ibid.*, IV.20.3.

27. *Id.*, *ST...* cit., 1a.18.3.ad.1.

is the same, not having an end outside itself²⁸. Therefore, Aquinas concludes, this “motion” is different from the strict Aristotelian definition of the *Physics*. However, he does seem willing to assimilate the Aristotelian view with the self-moving soul of Plato when he writes,

Plato understood by motion any given operation, so that to understand and to judge are a kind of motion. Aristotle likewise touches upon this manner of speaking in the *De Anima*. Plato accordingly said that the first mover moves himself because he knows himself and wills or loves himself... There is no difference between reaching a first being that moves himself, as understood by Plato, and reaching a first being that is absolutely unmoved, as understood by Aristotle²⁹.

Elsewhere, Aquinas explicitly states that life is especially manifested in motion and specifically in self-motion and those things which put themselves into operation³⁰. He states that if love, drive and motion are particularly suited to the Holy Spirit, as scripture suggests³¹, it is here that we find the dynamism of the Trinitarian life fully expressed and mediated.

In expounding Aquinas in this way I am not attempting to give an account of the causal mechanism of the universe’s creation. Creation *ex nihilo* is not ordinary causality, so much as the intrinsic basis of all causality. Neither do I wish slavishly to follow modern science’s tendency to privilege the temporal origin of the cosmos in giving an account of the universe’s beginnings. Creation *ex nihilo* – the doctrine that creation, at every moment, is of nothing – as such privileges no *particular* temporal instant as revealing more acutely the nature of the cosmos as suspended over the *nihil*. Rather, my intention is to point to the way in which, for one of the most prominent theologians of the Christian tradition, effects analogically resemble their causes. Creation and motion are apparently opposed, for the former excludes the latter. Meanwhile, both are effects

28. On Aristotle’s distinction between *energeia* and *kinesis*, see ARISTOTLE, *Metaphysics*, IX.6.

29. AQUINAS, *SCG...* cit., I.13.10

30. *Ibid.*, IV.20.6.

31. *Ibid.* Aquinas mentions *John* 6,64 and *Ezekiel* 37,5.

of something more real. They are reconciled and related, therefore, by their participation in the eternal and perfectly subsistent emanation of the divine persons. Yet while Aquinas talks of emanation in creatures and God, he does so by analogy, always aware that however great the similitude, the dissimilitude is always greater.

There is a sense, therefore, that if motion is the means of the perfection of creatures – their passage to actuality – then we might understand motion to be analogically related to the actuality of God's inner Trinitarian dynamic. I would now like to examine the way in which a more recent a more recent theology, Hans Urs von Balthasar, develops this Thomist understanding of the doctrine of God and cosmic motion with particular reference to an understanding of both creation and motion as *relational*. More particularly, Balthasar moves beyond Aquinas in describing both motion and creation as related by analogy to the eternal kenosis within the Trinitarian Godhead.

2. BALTHASAR: DIFFERENCE AND THE DYNAMISM OF TRINITARIAN LOVE

The life of God, for Balthasar, is characterised by self-donation in the form of kenosis³². The revelation of this self-giving is recorded in the hymn to Christ's self-emptying in the incarnation in Philippians 2. Within the economy of salvation, this kenosis reaches its greatest intensity on Holy Saturday when God, in sovereign freedom, endures the dereliction of godlessness. Yet it is crucial for Balthasar that this kenotic moment is not an arbitrary act of God, as if the divine had suddenly become subject to godlessness in order to be fully himself (as in the thought of Jürgen Moltmann). Rather, it is suffering and dereliction which are made subject to God, and the godlessness of Holy Saturday is always the economic outworking of God's immanent and eternal kenosis³³. It is at this mo-

32. H. U. VON BALTHASAR, *Theo-Drama: Theological Dramatic Theory*, trans. G. HARRISON, Ignatius Press, San Francisco 1994, vol 4, 325 ff.

33. ID., *The Glory of the Lord: A Theological Aesthetics*, trans. E. LEIVA-KERIKAKIS, Ignatius Press, San Francisco 1982, vol. I, 461: «God's incomprehensibility is now no longer a mere deficiency in knowledge, but the positive manner in which God has loved us so much that he surrendered his only Son for us, the fact that the God of plenitude has poured himself out, not only into creation, but emptied himself into the modalities

ment in the economy of salvation that it is revealed that even that which is *not* God is brought to be subject *to* God. Moreover, as Graham Ward observes, this kenosis is not christomonistic, an act confined to Christ's incarnation and crucifixion. Rather, divine kenosis, as Trinitarian and eternal, is the possibility of God's self-giving within the economy of salvation³⁴. As Aquinas refers to the eternal emanation of the Son from the Father, so for Balthasar the Father pours out his life without remainder in the Son's eternal begetting. The Son's response is kenotic *eucharistia*, thus constituting a "eucharistic movement back and forth from the Father"³⁵. Importantly, the self-donation of the Father is also the self-reception of the Son, thus constituting the relational nature of the eternal divine gift: self-donation and self-reception are one. This love cannot be contained within an enclosed dyad, but opens in eternity in the procession of the Spirit who maintains the infinite difference between Father and Son. This infinite *diastasis* is revealed in the Son's cry of dereliction on the cross and the silence of Holy Saturday³⁶. Within that hiatus is contained not only sin, but the whole of creation, for the "otherness" of creation – the ontological difference – is itself the *imago* of the infinite difference which is being itself, namely the difference of the divine persons. Balthasar writes,

If, within God's identity, there is an Other, who at the same time is the image of the Father and thus the archetype of all that can be created; if, within this identity, there is a Spirit, who is the free, superabundant love of the "One" and of the "Other", then both the otherness of creation, which is modelled on the archetypal otherness within God, and its sheer exist-

of an existence determined by sin, corrupted by death and alienated from God». Crucially, in maintaining that Christ's kenosis on the cross is the economic outworking a God's eternal kenosis, Balthasar is *not* suggesting that there is an eternal suffering in God. Rather, within a sinful world, the cross is the way in which eternal love manifests itself. It is the way in which the eternal love of God, which has always flowed to creation, is maintained in its self-giving in the face of sin. I am grateful to D. C. Schindler for highlighting this point to me.

34. See G. WARD, "Kenosis: Death, Discourse and Resurrection", in L. GARDNER - D. MOSS - B. QUASH - G. WARD (eds.), *Balthasar at the End of Modernity*, T&T Clark, Edinburgh 1999, 15-68, citing 44-45.

35. BALTHASAR, *Theo-Drama: Theological ... cit.*, vol. 2, 268.

36. See ID., *Mysterium Paschale: The Mystery of Easter*, trans. A. NICHOLS, OP, T&T Clark, Edinburgh 1990.

ence, which it owes to the intradivine liberality, are brought into a positive relationship to God³⁷.

In fact, for Balthasar, it is only the difference inherent within being itself which makes creaturely difference intelligible – especially the difference within all creatures, that between essence and existence³⁸.

The Trinitarian difference within the Godhead and the difference of essence and existence in creation indicate, for Balthasar,

both a *similitudo* (insofar as the multiplicity of creatures is one in *esse*) and a *maior dissimilitudo*, insofar as nondivine being necessarily cleaves in two and stands over against the divine identity in the form of non-identity³⁹.

This is to say that the diversity within creation is not to be interpreted as a fall, but is rather a participation in the Trinitarian difference of the Godhead⁴⁰. Yet because of the ontological difference in which the essence of non-subsistent creatures is not one with their existence, the resemblance or *similitudo* is, as Aquinas would say, one of creatures to God, and not of God to creatures⁴¹. Likewise, Balthasar refuses to mitigate the ontological difference.

So what, for Balthasar, is the nature of the *analogia entis* through which creation is formed as an *imago* of the eternal Godhead? For Balthasar, this must be kenosis which is itself the form of love. As Ward notes, the view that love is kenotic has strong precedent in the early Church: love is self-abandonment and gift, whereas sin is the attempt at self-possession as a rejection of self-donation⁴². Kenotic love is a self-donation, not a “giving-up”. This economy of love involves reception and therefore the

37. ID., *Theo-Logic: Theological Logic Theory*, trans. A. WALKER, Ignatius Press, San Francisco 2004, vol. 2, 180-181. See also ID., *Theo-Drama: Theological ...* cit., vol.4, 323.

38. *Ibid.*, 182. This is not to suggest in any way that “difference” is a straightforward concept. It is beyond the immediate purview of this essay to enter into a detailed discussion. For such an assessment of the difficulty of “thinking difference”, see R. WILLIAMS, “Afterward: Making Difference”, in GARDNER – MOSS – QUASH – WARD (eds.), *Balthasar at the End of ...* cit., 173-179.

39. BALTHASAR, *Theo-Logic...* cit., vol.2, 183.

40. *Ibid.*, 184-185.

41. See, for example, AQUINAS, *ST...* cit., 1a.4.3.

42. WARD, “Kenosis: Death, Discourse...” cit., 46.

relationality and difference of the giver and the recipient⁴³. In a move seemingly beyond Aquinas, and with an eye on the dangers of subordinationism, it is kenotic love which is elevated to the heart of Balthasar's theology:

But if we reflect once more on the process of the intradivine processions, two approaches are barred to us: the idea of a Father who generates the Son in order to come to know himself as God and the idea of a Father who, because he has already known himself perfectly, generates the Son. The first position would be Hegelianism, the second, thought through consistently, would be Arianism. For this reason, the immemorial priority of the self-surrender or self-expropriation thanks to which the Father *is* Father cannot be ascribed to knowledge but only to groundless love, which proves the identity of love as the “transcendental *par excellence*”⁴⁴.

As the “transcendental *par excellence*”, it is love alone which is credible as our means of understanding God's revelation of himself and creation's analogical relation to its divine source. Creation bears the marks of its origin: the love of God which is kenotic in nature. So created entities are understood to participate in the eternal kenosis of the persons of the Trinity by continually giving themselves to be seen, known, understood and delighted in. As Rowan Williams points out, reality is therefore kenotic and ek-static for Balthasar, for all things continually move out of themselves in self-donation⁴⁵.

How might kenotic love at the heart of divine being, and its concomitant image in creation, illuminate the nature of cosmic motion? To answer this question, it is necessary to refer to the specifics of the Aristotelian-Thomist understanding of motion. It must be remembered that motion prior to the advent of modern natural philosophy is a broad category referring not only to the locomotion of bodies in space, but also

43. For an exacting theological analysis of the gift, including a critique of Derrida's notion of the “one-way” gift, see J. MILBANK, *Being Reconciled: Ontology and Pardon*, Routledge, London 2003.

44. BALTHASAR, *Theo-Logic...* cit., vol. 2, 177.

45. See WILLIAMS, “Balthasar and the Trinity”, in E. OAKES – D. MOSS (eds.), *The Cambridge Companion to Hans Urs von Balthasar*, Cambridge University Press, Cambridge 2004, 41.

to the motions of quality and quantity: learning, growing and maturing in character, for example, are varieties of motion. Central to Aristotle and Aquinas's concept of motion is difference, which is also integral to Balthasar's understanding of love. For Aquinas, following both Plato and Aristotle, motion is always relational: there is a mover and that which is moved. Motion takes place between contraries (for example, black and white, ignorance and knowledge) and is passage from potency to act. It is a necessary condition for motion that there be something in act and something in potency with regard to the motion in hand.

Crucially, therefore, motion requires the difference of mover and moved, and the difference of potency and act. There is also a sense in which motion might also be described as ecstatic and even kenotic. I have already alluded to the distinction made by Aristotle between *energeia* (actuality) and *kinesis* (motion). The being of something in motion is always constituted by its relation to a mover as it passes 'beyond itself' from potency to act. At every moment of the motion, that which is in motion is exceeding itself as it receives a new form and progresses towards actuality. Therefore, Aristotle characterises motion as an *ecstasis* in which a being may receive a new form which is bestowed by its mover. Because nature is identified more particularly with form rather than matter, motion for Aristotle and Aquinas is a genuine transformation whereby something may receive a new form. By contrast, the being of what is fully actual is self-contained and, unlike that which is in motion, it is at every moment self-identical. However, this is not to say that an energetic being is self-enclosed. Quite the contrary is the case, for such actualised beings are the most potent and ready movers of those in potentiality.

In what sense might motion be kenotic in character? In any motion, the mover "donates" the form it already possesses and pours this into that which it moves. For example, in the case of the motion of learning, the teacher donates knowledge or the means of thought in such a way that the student, who is moved to knowledge, receives a genuinely new form. It is not the case that the teacher "gives up" knowledge in order to bring a student from potency to act; rather, this motion is brought about through self-donation. That which is moved receives and seeks a new actuality through desire. It is therefore not the case that creation is simply a series of ultimately passive objects which are moved or manipulated

in mechanical fashion by a divine subject. Rather, creation participates in being moved by God, for in its cosmic motion creation exhibits the desire for its natural end in the divine. Where humanity fails of its own power to participate in its motion by God, the divine provides the gift of grace whereby humanity may once again seek motion to the beatific vision⁴⁶.

Motion, therefore, requires difference and is ecstatic and kenotic in character. Motion is the temporal image of the differentiated, ecstatic and kenotic self-donation and self-reception which characterises the Trinitarian divine life. Cosmic motion is the “watermark” of creation’s divine origin, representing a *similitudo* – which is yet a *maior dissimilitudo* – of the cosmos to the divine life. This ‘watermark’ is the kenotic self-donation of love which moves the sun and other stars.

Moving to the last brief section of this essay, I would now like to contrast this understanding of cosmic origins and motion with the theology and cosmology of the greatest theorist of motion in early modern science, Isaac Newton. Following theologians including Michael Buckley, I see here the beginnings of the separation of cosmology from issues in theology and metaphysics, and the sundering of faith and reason⁴⁷.

3. NEWTON ON GOD AND MOTION

It is now commonly known that Isaac Newton, whose great work the *Principia Mathematica* was published in 1687, wrote far more theology than he did science. Because he denied the divinity of Christ and the doctrine of the Trinity – thus putting at grave risk his position at Trinity College, Cambridge – Newton did not publish his theological manuscripts⁴⁸.

Newton expounded his Arian views of Christ at least fifteen years prior to the publication of the *Principia*. There are two principle reasons why Newton held such an Arian view of God. The first relates to studies

46. On motion and grace, see OLIVER, “The Sweet Delight of Virtue and Grace in Aquinas’s Ethics”, in *International Journal of Systematic Theology*, 7.1 (January 2005) 52–71.

47. See M. BUCKLEY, *At the Origins of Modern Atheism*, Yale University Press, Yale 1987.

48. At the time of writing, Newton’s manuscripts are being made available on the internet by a project substantially sponsored by the Arts and Humanities Research Council and the Royal Society: <http://www.newtonproject.sussex.ac.uk>.

in Biblical interpretation and religious history which he initially undertook in earnest between the late 1660s and the mid-1680s and to which he was to return in the early part of the eighteenth century. Through his studies, Newton became convinced that the earliest Christian Church held an authentic and uncorrupted non-Trinitarian faith which understood Christ as an exalted and yet created mediator between God and the universe.

The second reason for Newton's Arianism, and one which was at the same time a consequence of this Christology, is more explicit and, although this view was undoubtedly formulated much earlier, it appears in the General Scholium of the second and third editions of the *Principia*. This was the belief in the utter supremacy, power and freedom of the will of the Lord God of Dominion⁴⁹. It was a supremely free and sovereign will which, for Newton, was the supreme attribute of God. Because this will was supremely free, this entailed its inscrutability and arbitrary character. It was because of God's omnipotent wilful dominion alone that he was worthy of worship. This voluntarism featured a dualistic distinction between God's *potentia ordinata* and *potentia absoluta*. It was by the former that God ordained and preserved the regular workings of the laws of nature. However, in the latter was enshrined the absolute power of God's will to suspend or change these laws at any moment. This was a kind of arbitrary "addition2 to God's *potentia ordinata*.

Newton's voluntarist Lord God of Dominion as described above was utterly remote and transcendent. This concept of the divine fitted neatly with Newton's physics in which the universe was seen to be filled with discrete objects whose particular motion required no reference to a relation with any other being. Interaction between discrete objects constituted change brought about by conflictual forces. Remember that, according to Newton's first law of motion, a body will continue in its state of motion or rest until it is subject to another force. Motion is a state, and any body will naturally resist a change in that state. What Newton is primarily concerned with is not motion per se, but forces which change a state of motion. Through the natural resistance to change possessed by

49. See I. NEWTON, *The Principia: Mathematical Principles of Natural Philosophy*, trans. I. B. COHEN - A. WHITMAN, University of California Press, Berkeley 1999, 939-944.

bodies, the universe exhibited some degree of stability and changelessness, this being a reflection of the divine nature itself. However, this left a theological gap for Newton which was somewhat unpalatable: how was he to describe a mode of divine action within such a world so as not to make God incidental to cosmology?

Newton gave two apparently different answers to this question. The first, in typical Arian fashion, saw the divine as utterly remote and acting through Christ as an intermediary. God and Christ were not one in substance, but one in unity of will and dominion. Newton states that, on this view, Christ is understood as the “viceroy” of God, putting into action the dictates of the divine will. The second means of divine action, however, is direct within absolute space. J. E. McGuire has argued that this latter form of divine action shows that Newton’s Arianism was limited in its effect upon his cosmology⁵⁰. However, I will suggest that the latter notion of divine action is also the result of Newton’s Arianism and that this conception of God reinforces his understanding of motion.

Absolute space is the context and basis for motion in Newton’s universe. He outlined his notion of space in *De Gravitatione et Aequipondio Fluidorum*, a treatise which was to form the basis of many arguments in the first edition of the *Principia*⁵¹. Newton explains that space is neither substance nor accident, but rather “an eminent effect of God, or a disposition of all being”⁵². Space is ultimately characterised as extension. We are able to abstract «the dispositions and properties of a body so that there remains only the uniform and unlimited stretching out of space in length, breadth and depth»⁵³. Space is also «eternal in duration and immutable in nature, and this because it is the emanent effect of an eternal and immutable being»⁵⁴. In a fashion which appears to consider space as “begotten” of God, Newton explains that,

50. See J. E. MCGUIRE, “The Fate of the Date: The Theology of Newton’s *Principia* Revisited”, in M. J. OSLER (ed.), *Rethinking the Scientific Revolution*, Cambridge University Press, Cambridge 2000, 271–295.

51. This text is available in A. R. HALL – M. B. HALL (eds.), *Unpublished Scientific Papers of Isaac Newton: A Selection from the Portsmouth Collection in the University Library*, Cambridge, Cambridge University Press, Cambridge 1962, 89–156.

52. *Ibid.*, 132.

53. *Ibid.*

54. *Ibid.*, 136.

If ever space had not existed, God at that time would have been nowhere; and hence either he created space later (in which he was not himself), or else, which is less repugnant to reason, he created his own ubiquity⁵⁵.

Thus it can be seen that in the absence of a fully divine Christ, absolute space becomes the basis of creation, forming the “disposition of being qua being”, for such space is “eternal in duration and immutable in nature, and this because it is the emanent effect of an eternal and immutable being”. While space is not be literally God’s sensory medium, it is difficult to avoid the conclusion that Newton has described a spatial and three dimensional Godhead. Indeed, Newton’s absolute space – eternally of God, as it were – takes on the characteristics of an orthodox Christ. Whereas, for Aquinas, God creates and sustains the world through Christ’s emanation from the Father, so for Newton, God creates the world in a co-eternal and uncreated absolute space through the exercise of his will.

It seems, therefore, that absolute space coupled with the action of the divine will is the ontological precondition of all being. It is by means of co-eternal and infinite space that God is able to operate and instantiate a material cosmos. Whereas for Aquinas (and those in the broad Thomist tradition such as Balthasar) the motion of a body is itself a participation and effect of the knowledge of the body’s form in the perfect “motionless motion” of God, namely in the emanation of the Son from the Father, for Newton creation occurs through the inscrutable and arbitrary “motions” of the divine will. This is expressed in a recent article by J. E. McGuire in which he states that for Newton,

God does not recreate similar conditions in successive regions of space; he maintains the same formal reality in different parts of space through a succession of times. In this way the continuity of motion is the real effect of God’s motion⁵⁶.

Yet what divine motions can these be within Newton’s Arian voluntarism? They can only be the motions of an arbitrary and inscrutable

55. *Ibid.*, 137.

56. MCGUIRE, “The Fate of the Date...” cit., 282.

divine will. Whereas, for Aquinas, the “motionless motion” of the divine emanation was able to provide the ontological basis and goal of all motion, for Newton, who has already discounted the possibility of relationality within the Godhead, motion can only be the effect of the imposition of divine volition. The lack of Trinitarian relationality in Newton’s conception of God means that the universe cannot be thought of as a hierarchy and system of related motions which are images of the divine life, but rather as the action of one being, God, within absolute space to instantiate a material body, whereupon the created being retains a primitive state of motion which is discrete and self-explanatory.

4. CONCLUSION

Where does this leave us? There is a question which pervades the traditional reflection on creation which is pertinent: could a single, monadic, non-relational divinity of Newtonian variety “create”? Some, including recently Thomas Weinandy in the spirit of Balthasar, argue no⁵⁷. He states that,

If God were a solitary monad existing in complete self-isolation, the “thought” of creating something other than himself could never arise. It would be ontologically impossible for the thought of “another” to arise, for there would be no ontological ground upon which this thought of “another” could arise. Being the sole being that existed, it would be impossible for a single-person God to conceive of anything other than himself⁵⁸.

This is why one might suppose that a monadic personal God must create of necessity in order to be personal, for being personal necessitates relationality. Alternatively, a monadic God, in order to conceive of something other than himself, must create not *ex nihilo*, but out of a non-temporally bounded, always existent “other” in the form of a pre-

57. See BALTHASAR, *Theo-Logic...* cit., vol. 2, 181.

58. T. WEINANDY, *Does God Suffer?*, University of Notre Dame Press, Notre Dame, Indiana 2000, 139-140, n.75.

existent material nature akin to Aristotle's eternal cosmos or Plato's *khora*. It would then be God's relation to this eternal Aristotelian cosmos which was the basis of God's creating of an other.

Because Newton proposes just such a deity – a God devoid of relationality and characterised by freedom understood in terms of an arbitrary, all-powerful and inscrutable will – he cannot properly think creation *ex nihilo*. Rather, creation emerges within a co-eternal absolute space which then forms the basis of God's relation to his creation, an absolute space which, bizarrely, takes on the characteristics of an orthodox Christ. Moreover, there can be no reason intrinsic to God himself concerning *why* he would create. This is beyond intelligibility and reason, for the divine will, in being sovereign and free, is not bounded by “reasons” for creating. The consequence of the combination of Newton's theology and natural philosophy is a sense that creation – as a theological doctrine – stands outside the realm of reason, whereas the natural processes under examination in the *Principia* are merely the instantiation of an inscrutable divine will and the subject of a wholly autonomous natural philosophy. Moreover, with the central characteristic of nature – motion – understood non-rationally and through the category of force, there seems no basis of relating such motion to the life of God, as there had been in Aquinas where motion is understood as an analogue of the supreme relationality of the Trinity. It therefore comes as no surprise that early modern science divested itself so easily of metaphysical and theological concerns.

Properly to think creation *ex nihilo*, one requires a doctrine of God which is sufficiently rich such that God himself is the full and wholly adequate reason not only for the universe's temporal beginning (if, indeed, we can properly conceive of such a thing), but for God's continual sustaining of creation over the *nihil*. This, I would suggest, following Aquinas and Balthasar, is found only in a fully Trinitarian doctrine. To be sure, for Aquinas it is not necessary to explicate a Trinitarian doctrine of God in order to arrive at a notion of creation *ex nihilo*, yet it is surely the case that the doctrine of the Trinity helps us to elucidate the meaning and implications of creation *ex nihilo*, even if, on occasion, this is undertaken in a profoundly apophatic mode. The relation of God to the kenotic act of creation is analogically related to God's kenotic self-relation in

the emanation of the persons of the Trinity. This much is proposed by, amongst others, Barth, Pannenberg and Torrance. Going just a little further, what I have also suggested is that the dynamic eternal emanations within the Godhead are also related by analogy to cosmic motion – the means of creaturely perfection – where motion is understood as fundamentally relational and the key characteristic of the cosmos. We might even suggest that God continually “moves” creation from nothingness to being. Because such a doctrine of God is sufficiently rich that we need not postulate anything other than God to account for creation, this can be the only way of truly thinking creation which is of nothing, thereby maintaining the distinctiveness of theological cosmology and avoiding the reification of the *nihil*. As I have argued in more details elsewhere, this also allows us to understand the subject matter of physics – motion – as included and taken up within the subject matter of theology by virtue of motion’s analogical relation to the doctrine of God⁵⁹. Meanwhile, we would do well to remember that, for theologians such as Aquinas and Balthasar, the doctrine of creation *ex nihilo* is first a doctrine of God and only then a cosmology.

SOMMARI

Quale rapporto esiste tra la cosmologia del Big Bang e la dottrina della creazione dal nulla? Sono equivalenti oppure si contrappongono? Per poter comprendere il significato dell’espressione “dal nulla” ed evitare la tendenza di interpretare la creazione univocamente come un processo naturale, la dottrina della creazione dal nulla va considerata innanzitutto in rapporto alla dottrina della Trinità. Vengono in aiuto le categorie di movimento e di emanazione, utilizzate da San Tommaso: questi comprende la creazione come emanazione da Dio e il movimento come il modo in cui essa partecipa al dinamismo divino intratrinitario. La riflessione di von Balthasar sulla differenza all’interno della Trinità permette inoltre di individuare nel movimento una struttura di autodonzione kenotica. Infine, l’approfondimento dell’impostazione del pensiero di

59. See OLIVER, *Philosophy, God and ...* cit., ch. 6.

Newton illustra i motivi che sono alla base della separazione tra fede e ragione e, di conseguenza, tra cosmologia teologica e scienze naturali.

Which relation exists between the cosmology of the Big Bang and the doctrine of creation from nothing? Are they equivalents or do they contradict themselves? To be able to understand the meaning from the expression “from nothing” and to avoid the tendency to interpret the creation univocally as a natural process, the doctrine of creation from nothing is considered before all else the relation to the doctrine of the Trinity. They come to help the categories of movement and of emanation, utilized from Saint Thomas: with these it comprehends creation as emanation from God and the movement from the way in which it participates to the intertrinitarian divine dynamism. The reflection von Balthazar of the internal difference of the Trinity permits furthermore of individuate in the movement a structure of kinetic autodonation. Finally, the elaboration of the planning of the thought of Newton illustrates the motives that are at the base of the separation between faith and reason and, as a consequence, between theological cosmology and natural sciences.

Quel rapport existe-t-il entre la cosmologie du Big Bang et la doctrine de la création *ex nihilo* ? Sont-elles équivalentes ou s’opposent-elles ? Pour pouvoir comprendre le sens de l’expression “*ex nihilo*” et éviter la tendance d’interpréter la création univoquement comme un processus naturel, la doctrine de la création *ex nihilo* est considérée avant toutes choses en rapport à la doctrine de la Trinité. Les catégories de mouvement et d’émanation utilisées par Saint Thomas, viennent nous aider: il comprend la création comme émanation de Dieu et le mouvement comme le mode selon lequel la création participe au dynamisme divin, intratinitaire. La réflexion de von Balthasar sur la différence à l’intérieur de la Trinité permet en outre d’individuer dans le mouvement, une structure d’autodonation kénotique. Enfin, l’approfondissement de la formulation de la pensée de Newton illustre les motifs qui sont à la base de la séparation entre foi et raison, et, par conséquence, entre cosmologie théologique et sciences naturelles.

¿Cuál es la relación entre la cosmología del Big Bang y la creación de la nada? ¿son equivalentes o contrapuestos? Para poder comprender el significado

de la expresión “de la nada” y evitar interpretaciones unívocas, como un proceso natural, debe considerarse la doctrina de la creación de la nada, en relación a la doctrina de la Trinidad. Tomás de Aquino usa las categorías de movimiento y emanación con las que entiende al creación como emanación de Dios y el movimiento como el modo en que participa del dinamismo divino intratrinitario. La reflexión de von Balthasar sobre la diferencia dentro de la Trinidad, permite identificar los motivos que hay en el origen de la división entre fe y razón y como consecuencia entre cosmología teológica y ciencias naturales.

Qual a relação que existe entre a cosmologia do Big Bang e a doutrina da criação do nada? São equivalentes ou se contrapõem? Para poder compreender o significado da expressão “do nada” e evitar a tendência de interpretar a criação univocamente como um processo natural, a doutrina da criação do nula vem considerada antes de tudo em relação à doutrina da Trindade. Vêem em ajuda as categorias de movimento e de emanção, utilizadas por São Tomás: Este compreende a criação como emanção de Deus e o movimento como o modo em que essa participa do dinamismo divino intra-trinitário. Além disso, a reflexão de Von Balthasar sobre a diferença ao interno da Trindade permite individuar no movimento uma estrutura de auto-doação kenótica. Enfim, o aprofundamento da impoção de Newton ilustra os motivos que estão na base da separação entre fé e razão e, de consequência, entre cosmologia teológica e ciências naturais.

Ironic Creation

JONATHAN LEAR *

1. THE EXPERIENCE OF IRONY

I am sitting at home one evening grading papers and, perhaps in a moment of fatigue or boredom, I begin to wonder what this has to do with teaching my students. Does a final paper really facilitate a student learning what the seminar has been about? Or is it just another dutiful routine which students process through in order to get their grade and get on with the rest of their lives? For a while, this is a normal reflection in which I step back and wonder about the value of my activity. Of course, for this reflection to occur I need to have some sense of what my ideal is. It is from the perspective of teaching - or, rather, *my* perspective on what would be involved in teaching well - that I question my current activity of grading papers. This is an example of what I am going to call the *standard model* of reflective questioning. I may not have a fully self-conscious or articulate conception of what my ideal is; perhaps, indeed, this is a moment of reflection in which I come better to understand the ideal. Still, to use a metaphor that is familiar in contemporary philosophy, it is a moment in which I am able to “step back” from my current activity and ask how well or badly it fits with my own practical commitment

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being a teacher¹. Obviously, such a reflection might on any given occasion be motivated by laziness. Perhaps I deceive myself in this way: in the name of high ideals, I try to wiggle out of work I would rather not do (and not notice that this is what I am doing). But in a paradigm case, such a moment of reflective questioning is one way I manifest that teaching matters to me. This sort of reflection is part and parcel of inhabiting a practical identity, in this case of being a teacher. A practical identity, Christine Korsgaard tells us, is «a description under which you value yourself, a description under which you find your life to be worth living and your actions to be worth undertaking»². My practical identity commits me to norms in relation to which I can judge activities, temptations and inclinations as either supporting or conflicting with my identity as a teacher. In this case, I am wondering whether my grading papers really is an activity of a teacher, or whether it is simply a hollow routine, an empty social practice. Perhaps I will decide to talk this over with my colleagues at a department meeting: perhaps we can figure out a better way to way to evaluate students more in line with our core function of teaching. Thus far I am at the level of reflection that might lead me to engage in educational reform – or, it might lead me back to the social practice of grading papers, now satisfied that the activity does live up to my ideals of teaching.

I mention this moment of reflection in order to focus on a moment that is fundamentally different from it. So, I am engaged in this very reflection, but then things get out of hand. I am *struck* by teaching in a way that disrupts my normal self-understanding of what it is to teach (which includes normal reflection on teaching). This is not a continuation of my practical reasoning; it is a disruption of it. It more like vertigo than a process of stepping back to reflect. When it comes to previous, received understandings of teaching – even those that have been reflectively questioned and adjusted in the normal ways – *all bets are off*. No doubt, I

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1. See e.g. C. M. KORSGAARD, *The Sources of Normativity*, Cambridge University Press, Cambridge 1996, 90-130; ID., *Self-Constitution: Agency, Identity and Integrity*, Oxford University Press, Oxford - New York 2009, 72, 104-105, 109, 119-120, 125-126. See also T. NAGEL, “Universality and the Reflective Self”, in KORSGAARD, *The Sources... cit.*, 200-209.
 2. KORSGAARD, *The Sources... cit.*, 100.

can still use general phrases like “helping my students to develop”: but such phrases have become enigmatic, open-ended, oracular. They have become signifiers whose content I no longer grasp in any but the most open-ended way. I no longer know who my “students” are let alone what it would be to “help them develop”. Are my students the individuals coming into my classroom at the appointed time – or are they to be located elsewhere? Are they in the younger generation – or are they my age or older? Might they come along in a different generation altogether – maybe in the next century? And if my classroom is where my students are, where is my classroom? What am I to make of the room I actually do walk into now? Where should I be to encounter my students? What would it be to *encounter* them? And if I were to encounter them, what would it be to help them, rather than harm them? What is development? Already I have enough questions to last a lifetime, and I do not even know where to begin.

This is a different order of concern from something that might at first look a lot like it. In a different mode, a normal mode, I consider myself a serious teacher. It might take me a lifetime of practice before I really get good at it. I am dedicated to this practical identity. I treat teaching as a master-craft, an arduous but noble calling; and even after all these years, I still think of myself as an apprentice, en route. On occasion I do wonder about those around me who assume teaching is easy, or even those who find it difficult, but assume they know what it is: what *are* they up to? Nevertheless, in this reflective and questioning mode, I still have a fairly determinate sense of the path I am on. Of course, the path essentially involves reflective questioning of what I am doing; and as a result of the questioning I may alter my direction one way or another. Yet, I know what to do today and tomorrow; and I trust that if I keep practicing and developing my skills I will get better at it. Maybe I’ll even get good at it. In this mode, I act as though I have practical knowledge of how to go about acquiring the skill, even if, in my view, true mastery lies off in the future.

By contrast, in the ironic moment, my *practical knowledge* is disrupted: I can no longer say in any detail what the requirements of teaching consist in; nor do I have any have any idea what to do next. I am also living through a breakdown in *practical intelligibility*: I can no longer make sense

of myself (to myself, and thus can no longer put myself forward to others) in terms of my practical identity. That I have lost a sense of *what it means* to be a teacher is revealed by the fact that I can now no longer make sense of what I have been up to. That is, I can certainly see that in the past I was adhering to established norms of teaching – or standing back and questioning them in recognized ways. In *that* sense, my past continues to be intelligible to me. But I now have this question: what does *any of that* have to do with *teaching*? And if I cannot answer that question my previous activities now look like hubbub, busyness, confusion. I have lost a sense of how my understanding of my past gives me any basis for what to do next. That is why, in this moment, I am called to a halt. Nothing any longer makes sense to me as the next step I might take *as a teacher*. Until this moment of ironic disruption, I had taken various activities to be unproblematic manifestations of my practical identity. Even in this moment, I might have no difficulty understanding what my practical identity requires, just so long as practical identity is equated with the socially available practices, or some reflected-upon variant. My problem is that I no longer understand what practical identity so construed has to do with my practical identity (properly understood).

This moment of vertiginous disruption is, I think, a paradigm case of the experience of irony. Obviously, the word “irony” has many senses that are, I think, linked by family resemblances³; but I want to focus in on the sense that is philosophically primary. It has, I think, been largely hidden from view in contemporary culture due to more superficial uses of the term. It is, I think, the sense of irony that the philosopher and religious figure Søren Kierkegaard tried to isolate, especially in his later work⁴. To

3. Indeed, it has come to be used so loosely, the term can mean almost anything or nothing. To take one example, the distinguished literary critic Cleanth Brooks said that irony is «the most general term we have for the kind of qualification which the various elements in a context receive from the context» (C. BROOKS, *The Well Wrought Urn*, Harcourt & Brace, New York 1947, 191). And in «Irony as a Principle of Structure» he says, «the *obvious* warping of a statement by the context we characterize as “ironical”» (Id., <http://74.125.155.132/scholar?q=cache:xfe7l8hSgoJscholar.google.com/+Irony+as+a+principle+of+structure&hl=en>). To which I say: oh dear! I am reluctant even to put this in a footnote. It is difficult to see how such statements can do anything other than encourage mushy thinking. Reader beware!

4. Most notably in S. KIERKEGAARD, *The Concluding Unscientific Postscript to the Philosophical Crumbs*, trans. A. HANNAY (ed.), Cambridge University Press, Cambridge – New

get clear on what irony is I want to distinguish *the experience of irony* from the development of a *capacity for irony*; and to distinguish that from what Kierkegaard calls *ironic existence*. In a nutshell, the experience of irony is a peculiar experience like the one just described. It is essentially first-personal: not simply in the sense that all experience is the experience of some I, but that in having an experience of irony I experience myself as confronted by that very experience. Developing the capacity for irony is developing the capacity to occasion an experience of irony (in oneself or in another). We tend to think casually of “the ironist” as someone who is able to make certain forms of witty remarks, perhaps saying the opposite of what he means, of remaining detached by undercutting any manifestation of seriousness. This, I shall argue, is a derivative form; and the deeper form of ironist is one who has the capacity to occasion an experience of irony. Ironic existence is whatever it is that is involved in turning this capacity for irony into a human excellence: the capacity for deploying irony in the right way at the right time in the living of a distinctively human life. For the moment, I want to focus on the experience of irony.

The experience of irony is a peculiar species of uncanniness. In the example I am developing, it is a manifestation of teaching mattering to me that I am disrupted in my normal teaching activities – and all of it becomes strangely unfamiliar in its familiarity. Even my normal reflections on teaching have come to seem strange. Perhaps my standard reflections – the activity that contemporary philosophers so often link to the human capacity for freedom – are part and parcel of a stupor I live in, a confusion I cannot get out of just by repeated acts of “stepping back”. This is what Kierkegaard called illusion: a systematically confused outlook that is able to metabolize and contain purported acts of reflection. The experience of irony is the uncanny disruption of *all* of that. It is the *unheimlich* maneuver. However, this is not an ordinary experience of uncanniness, in which the familiar is suddenly experienced as unfamiliar in its familiarity. What is peculiar to irony is that it manifests passion for

York 2009, by the pseudonymous author Johannes Climacus. See e.g. 420–425, and note the criticisms of “Magister Kierkegaard”. I believe Kierkegaard was here trying to correct an earlier view expressed in his *Magister's Thesis, The Concept of Irony* -- which he later came to think as too one-sided. See also 461–463, with special reference to the footnote at 462n.

a certain direction. It is because I care about teaching that I have come to a halt as a teacher. Coming to a halt in a moment of ironic uncanniness is how I manifest – in that moment – that teaching matters to me. I have a strong desire to be moving in a certain direction – that is, in the direction of becoming and being a teacher – but I lack orientation. Thus the experience of irony is an experience of *would-be-directed* uncanniness. That is, an experience of standard-issue uncanniness may give us goose bumps or churn our stomachs; the experience of ironic uncanniness, by contrast, is more like losing the ground beneath one's feet: one longs to go in a certain direction but one no longer knows where one is standing, if one is standing, or which direction is the right direction. In this paradigm example, ironic uncanniness is a manifestation of utter seriousness and commitment (in this case, to teaching), not its opposite. As Johannes Climacus, one of Kierkegaard's pseudonymous authors puts it, «It doesn't follow from irony being present that earnest is excluded. That is something only *privat-docents* assume»⁵.

It is often assumed that irony is a form of detachment. From the perspective of those who are embedded in the social practice – who just don't get what is going on with me – it may well *appear* that irony is a form of detachment, a lack of commitment or seriousness. For, after all, it is a peculiar form of detachment *from the social practice*. And, as we shall see, it may also be the occasion for a peculiar form of re-attachment. But if, in one's blinkered view, the social practice is all there is – in particular, that the norms of teaching derive from the social practice – then it is easy to view irony as it regularly is viewed. “Lear hasn't handed in his grades – typical; and now he's jabbering on about not knowing how to grade. *Of course* he knows how to grade; he's just being ironic. It would be better if we had a colleague who was committed to teaching”. To the socially embedded, it is precisely this manifestation of commitment that will appear as lack of commitment – perhaps as dissembling or as sarcasm. (That is, of course, precisely how Socrates seemed to some of his interlocutors.)

If we get away from misleading appearance, and try to capture what is really going on with me, the language that suggests itself is that of Platonic Eros: I am *struck* by teaching – by an intimation of its goodness,

5. *Ibid.*, 232n.

its fundamental significance – and am filled with longing to grasp what it is and incorporate it into my life. I can no longer simply live with the available social understandings of teaching: if I am to return to them it must be in a different way. Thus the initial intuition is that there must be something more to teaching than what is available in the social practice (which includes standard reflections on the practice). Irony is thus an outbreak (or initiation) of transcendent aspiring – that is, transcendent with respect to available social practices. The experience of ironic uncanniness is one significant form such transcendent-aspiring takes. Because there is embodied in this experience an itch for direction – an experience of uncanny, enigmatic longing – it is appropriate to conceive the experience of irony as an experience of *erotic uncanniness*.

Plato gave this experience a mythical and metaphysical interpretation. A person is struck by beauty here on earth and is driven out of his mind because he is reminded of the true beauty of the transcendent forms. This is the “greatest of goods”, Socrates tells us: «god-sent madness is a finer thing than man-made sanity» (*Phaedrus* 244a-d, 245b-c, 249d-e). Platonic metaphysics has been out of fashion, and thus there is a tendency to treat Plato’s account of this experience as though it was at best an intriguing moment in the history of philosophy. Plato emphasizes the importance of the disruptive, disorienting experience as that from which philosophical activity emerges⁶. I think Plato is right that such moments of disruption are philosophically significant – and if we are not willing (or ready) to accept his account of how it occurs, we need to find another. Though Socrates is describing an intense moment of god-sent madness – thus his language is dramatic – the structure of the experience fits the ironic uncanniness I have been trying to isolate. Those who are struck in this way «do not know what has happened to them for lack of clear perception» (250ab). They are troubled by «the strangeness (*atopia*) of their condition» (251e), but they also show “contempt for all the accepted standards of propriety and good taste” – that is, for the norms of social

6. See, for example, Socrates’ account of how the prisoners in the Cave break their bonds (PLATO, *Republic* VII, 515c-d) The prisoner is *suddenly* (ἐξαίφνης) compelled to stand up (515c6); and is and is pained and puzzled (ἀπορρρρρρ; δ6) to turn around. And see Alcibiades’ description of Socrates’ disruptive effect upon him in *Id.*, *Symposium* 215d-216d.

pretense. Yet all along «they follow the scent from within themselves to the discovery of the nature of their own god» (252e–253a). If we de-mythologize this point and put it in the context of the example I have been developing, it looks like this: I have already taken on the practical identity as a teacher. I have internalized its values: its principles are to some extent within me. This is the “scent from within”: precisely by following the values of my practical identity, reflection on its norms and on how well or badly I live up to them... I am led to a breakdown in these normal goings-on. There is something uncanny about, of all things, teaching. It *seems* as though there is something about teaching that transcends (what now seems like) the dross of social practice. There is something about my practical identity that breaks my practical identity apart: it seems larger than, disruptive of, itself. This is the experience of irony.

Call this an existential crisis if you will, but this is not how the expression is normally used. In – forgive the expression – a normal existential crisis, life comes to seem empty, and I throw it all overboard in order to do something dramatically different. Perhaps I move to the arctic to take up the life of a hunter-gatherer⁷. By contrast, in the ironic experience, it is my *fidelity* to teaching that has brought my teacherly activities into question. For a similar reason, irony also differs from the experience of absurdity that Thomas Nagel describes⁸. It is not an experience of the meaninglessness of life so much as of its value: it is because my life as a teacher matters to me that I am disrupted. Nagel argues that the experience of absurdity arises from an inherent feature of the standard form of reflective self-consciousness: that we are able to step back from daily life and view it “with that detached amazement which comes from watching an ant struggle up a heap of sand”⁹. On this view, reflective consciousness itself has no commitments; it is just a detached observer of commitment. I suspect there is an idealization in this picture of reflection: that in seeing ourselves in the humble position of an ant we thereby give ourselves

7. See H. BRODY, *The Other Side of Eden: Hunters, Farmers and the Shaping of the World*, Faber and Faber, London 2002.

8. T. NAGEL, “The Absurd”, in ID., *Mortal Question*, Cambridge University Press, Cambridge UK - New York 1979, 11–23.

9. *Ibid.*, 15.

a God's-eye perspective. In any case, ironic experience, by contrast, is a peculiar form of *committed* reflection.

I have been describing a dramatic moment to bring the large-scale structure of irony into view, but I believe there are petite moments of ironic uncanniness that are over almost as soon as they begin. These moments happen to us, we get over them quickly and move on, remembering at best a shadow of their occurrence. This is of more than psychological significance. It is not peculiar to me that such an ironic moment could occur – and there is more to be learned from this moment than that at any moment any one of us could go insane. There is a question of the philosophical significance of the possibility of such a moment. The weakest claim one might make is that this moment shows that practical identity has a certain instability built into it. It seems internal to the concept of *teacher*, for example, that, on the one hand, it must be realized and realizable in social practices which establish and maintain its norms (including revisions based on reflective criticism), but, on the other hand, there is also the possibility of disrupting one's sense of the validity of that practice in the name of the very norms the practice was meant to establish. But, as I shall argue, a stronger claim is warranted: namely, developing a capacity for ironic disruption may be a manifestation of seriousness about one's practical identity. It is not merely a disruption of one's practical identity; it is a form of loyalty to it. So, my ironic experience with teaching manifests an inchoate intimation that there is something valuable about teaching – something excellent as a way of being human – that is not caught in contemporary social practice nor in normal forms of questioning its norms. This is not social critique. No doubt, a social critic with good rhetorical skills might deploy irony to shake his listeners up in the name of the cause she wishes to advance. But it is a mistake to think that if we just got our social practice – say, of teaching – into good shape, there would no longer be room for ironic disruption of practical identity. It is constitutive of our life with a fundamental concept of identity – like *teacher* – that we are vulnerable to ironic disruption precisely in trying to live such a life.

2. THE IRONIC QUESTION

We are now in a position to grasp the form and force of a fundamental ironic question:

Among all teachers, is there a teacher?

It is a striking fact about us that we can immediately hear that a question is being asked, rather than a meaningless repetition. The form of the question is a tautology, yet we do not hear it as a tautology; and it is a revealing fact about us that this should be so. The question asks of a purported totality – in this case, the totality of teachers (socially recognized as such, those who put themselves forward as teachers, those whose *profession* in both the ordinary and literal sense is of a teacher) – whether *any* of its members live up to the aspirations which purportedly characterize the totality. The fact that this question can be heard as a question essentially depends on the human ability to put oneself forward *as* doing something or *as* living in some way or other. If, by contrast, one were to ask

Among all ducks, is there a duck?

it would not be clear what, if anything, was being asked. Unlike humans, ducks do not make claims for themselves; they do not put themselves forward as anything at all. Of course, we might make a claim for the ducks: a master chef, standing in front of a pond, contemplating this evening's *canard à l'orange*, might ask just such a question; but it would not be based on any claims the ducks were making. Thus – in the case of the ducks – there is no room for bringing out a gap between the making of a claim, the profession or pretense of a certain life and the ideals that are the essence of that claim or life. One way to put this is to say that duckly life is at home with its essence. By contrast, human life is not at home with itself in this way. It is the peculiar experience of this gap opening up – between claim and aspiration – that is the experience of irony.

One way of grasping the peculiarity of this experience is to see that the ironic question on its own –

Among all teachers is there a teacher?

– even if asked sincerely, is not sufficient for the experience of irony. It is clear that such a question can be asked in a standard act of reflection, “stepping back” from an engagement in a practice to enquire into its presuppositions. I would then be questioning in a straightforward way

how well or badly a practice lives up to its own ideal. One might even call such questioning “ironic”, but one would be using the term in a philosophically derivative sense. The ironic question can at best be *an occasion* for an experience of irony. That is, for there to be full-throttle ironic uptake, the manner in which the question is experienced is all important: it must be experienced as a trigger for the experience of erotic uncanniness.

For Kierkegaard, the most important ironic question was:
Among all Christians is there a Christian?

The first occurrence of the term picked out all who thought of themselves as Christian, who put themselves forward as Christian, those who took themselves to be participants in the available social practices that understood themselves to be Christian. He called those available social practices *Christendom*, and so a variant on that ironic question is:

In all of Christendom, is there a Christian?

Kierkegaard himself believed that Christendom had become a rundown, decadent practice (he was primarily concerned with Protestant Christendom) – and he took it as his calling to use irony and humour to help his neighbours break out of illusion. But for the purposes of the present argument, we do not need to agree with any of this. Whether or not one agrees with Kierkegaard’s own understanding of Christian faith or with his critique of Christendom, the important point for now is that Christendom (the social organizations for the profession of Christian faith) contains within itself serious, thoughtful, passionate, earnest reflections on the meaning of Christianity. And, in particular, a reflective thought of the standard type using precisely those words –

In all of Christendom, is there a Christian?

– could easily be thought, and sincerely asked within Christendom. It is not unusual for a priest’s sermon to ask the congregation whether they are living up to Christian ideals. Questioning Christian practice in this way is itself part of Christendom. And such reflective self-questioning is no doubt often a healthy aspect of the practice. But precisely because such reflection is itself such an integral part of the practice, it is easy to assume that this is the form that *all* self-questioning takes. It is the possibility of ironic experience that calls this assumption into question. And

it does so independently of whether the social practice in question is robust, healthy, vibrant or rundown and decadent.

The experience of irony is a different form of questioning: it is more like the disruption of a world rather than a standard reflective questioning of what such a world consists in. This is what makes irony compelling. It is the mirror image of an oracle. An oracle begins with an outside source telling a person who he is in terms he at first finds alien and enigmatic. Then there is an unsettling process of familiarization: the person comes to understand what the oracle means as he comes to recognize that he is its embodiment. And, of course, the recognition of the meaning of the oracle is more than an increase in propositional knowledge - e.g. *that I am the one who murdered his father and married his mother*. It is the occasion for a disruption of my sense of who I am; and disorientation in a world that, until now, had been familiar. With this robust form of irony, the movement is in the opposite direction: a person gives a familiar designation to himself. He takes on a practical identity. As the irony unfolds, not only does the designation become weirdly unfamiliar: one suddenly experiences oneself as called to one-knows-not-what, though one would use the same language as before. In the cases we have been examining, one would not have anything more to say than that one is trying to be a teacher, or a Christian.

Oracles regularly depend for their power on the structure and ambiguity of their wording, so it is worth noting that the basic form of the ironic question has the structure of uncanniness. The first occurrence of the term in the sentence -

Among all Christians...

- gives us the those who put themselves forward as, think of themselves as Christian, the participants in the relevant available social practice: this is the familiar. But the second occurrence which gives the aspiration -

... is there a Christian?

- is also the repetition and return of Christianity, this time as strange, enigmatic, unfamiliar. As we have seen, the ironic question on its own does not guarantee ironic uptake - the experience of irony. But when the experience does occur, it has the structure of uncanniness. This is compatible to returning to Christianity as it is practiced and endorsing

that practice, but now with an internal understanding of a different form of questioning than is familiar or easily available.

Since I am not myself a Christian and irony is essentially first personal, allow me to develop the example in a manner that is appropriate to me and invite you, the reader, to adjust it in a manner appropriate to you. *Leviticus* 19:18 teaches us that we should love our neighbours as ourselves. I spend Sabbath morning reading that passage from Torah and listening to the rabbi give a sermon on how we often fail to live up to that ideal. I leave the synagogue and pass a beggar on the street; he irritates me; and then I remember the Torah portion and the rabbi's teaching. I turn around and give the beggar a dollar. He says, «You must be listening to your rabbi». What is he saying? We will never know. But I may understand him in a number of different ways. I may, first, take him to be saying that it is a memory of the rabbi's words that pricked my conscience. Or I may take him to be speaking "ironically" in the familiar sense of exuding sarcasm about the paltry nature of my donation. He's telling me in his "ironic" way - saying the opposite of what he means in a way I can recognize - that I should have given him *twenty* dollars. So far, we have not left the available social practice and familiar reflections on it. But suppose now it occurs to me that I *have* learned from my rabbi, *and that is my problem!*

Again, the manner of this occurring is all-important: I am shaken. It is not merely that I have a sincere, emotion-laden propositional thought with this content: it is that the having of this thought is the occasion for disruption and disorientation. It is as though Judaism itself has come back to haunt me: *everything* I have understood about Jewish life now strikes me as unfamiliar in its familiarity. Perhaps *everything* I have understood about loving one's neighbour as oneself is ersatz, a mere shadow; perhaps going to synagogue, reading the Torah, listening to the rabbi, *perhaps* all this is what *keeps me from* loving my neighbour as myself (through a routinized, flat understanding) - even though until now I have taken it to be the route through which one learns what this requirement means. Note that this need not be the fault of the rabbi, the synagogue, or the liturgy: it need not mean that the social practice is run down; it may only mean that *I* have been approaching the social practices in a run-down way. Note too that in trying to describe my disorientation, I use the

same terms as before – that I must love my neighbour as myself – only now they seem strange and compelling in their uncanniness. I may not yet know in any detail what the requirements of loving one's neighbour as oneself are; I may have only the barest inkling of the transformations I would have to undergo to be someone capable of such love; but at the same time I am shaken with respect to the world of possibilities that, until now, I have taken to be *the* world of possibilities.

So, when I get to an ironic question like

Among all those who love their neighbours, does anyone love his neighbour?

for it to function as a genuine occasion for irony it must shed its ordinary garb of tame Sabbath sermon; and it must lose its familiar sense of an appeal to a standard act of reflection. Indeed, when the question reaches its target, it calls into question whether our standard activities of reflection might be (in our case) ways of avoiding what the ideal calls us to. Nothing like thinking about the requirements of loving one's neighbour to keep one from ever getting around to loving one's neighbour! In the moment of ironic experience, by contrast, it is as though an abyss opens between our previous understanding and our dawning sense of an ideal to which we take ourselves to be *already* committed. This is the uncanniness of irony: we seem to be called to an ideal that, on the one hand, transcends our ordinary understanding, but to which we now understand ourselves as already committed.

The experience of irony is thus an uncanny doubling: it is as though a fundamental category of human existence – as a teacher, as a Christian, as a Jew – has come back to call itself into question. To describe the experience further: it is as though reality is calling appearance into question; though we have as yet such a dim glimpse of reality that our only experience of it is via its ability to disrupt our current acceptance of appearance. It is an experience that allows appearance to be experienced as appearance, as falling short. It may *also* allow me to return to my former practices reinvigorated, renewed in my sense of what I can achieve through available social forms. But now I return with a new sense of possibility: the possibility that the ideal around which I am organizing my life transcends my understanding of what that ideal consists

in, even though I would use the very same words to describe what my commitments are.

3. SOCRATIC IGNORANCE

This sense of possibility is, I think, a key ingredient in Socratic wisdom: the knowledge that he does not know. If one looks to the Platonic dialogues with this analysis of irony in mind, one can see that Socrates repeatedly poses the ironic question. In *Gorgias*, for example, Socrates asks whether

Among all politicians (in Athens) is there a single politician? (513e-521e). His answer is that no one in the entire cohort of those who put themselves forward as politicians qualify, nor do those whom we standardly take to have been great politicians, like Pericles; for none of them have genuinely been concerned with making the citizens better. «I am one of the few Athenians – not to say the only one – who understands the real political craft and practice politics – the only one among people now» (521d).

Similarly with rhetoric, Socrates asks

Among all rhetoricians is there a single rhetorician? (502d-504a). His answer again is that no one who puts himself forward, or anyone so reputed from earlier times, has been engaged in anything more than shameful flattery and gratification (503a-d). The true rhetorician looks to the structure and form of the soul, and crafts his speech so as to lead souls toward virtue and away from vice (504d-e, 503e-504a). Plato's implication is that if there is a single rhetorician in all of Athens, it is Socrates. And again:

Among all doctors, is there a doctor? (*Charmides* 156e-157b, 170e-171c, *Gorgias* 521a; *Republic* III. 405a-408e, 409e-410e; VIII.563e-564c; X.599b-c) Plato's answer: There is Socrates, for he is the one genuinely concerned with promoting health. Those who put themselves forward as doctors are in effect gratifiers and drug-dealers: helping those addicted to an unhealthy life to extend their sick lives.

Among all shepherds, is there a shepherd?

Plato: there is Socrates, because only he understands that a true shepherd looks to the good of his flock, not to those who feed off of them (*Republic* I. 345b-e)¹⁰.

Among all the wise, is there a wise person?

There is Socrates, for he alone knows that he does not know (*Apology* 23a-b). And so on. These questions all have the same form – and in each case the possibility for irony arises by showing that the socially available ways of putting oneself forward *as* a certain kind of human being falls short of its own aspiration. Let us call these socially available forms the *pretense* in the literal and non-pejorative sense of putting oneself forward, or making a claim. A social pretense already contains a pretense-laden understanding of its aspiration, but irony facilitates a process by which the aspiration seems to break free of these bounds. In each case a purported totality is interrogated as to whether *any* of its members actually fit the bill. So, irony interrogates a totality not for its alleged inclusiveness, but for whether it has anything at all to do with the totality it purports to be. It is a movement that exposes a pretense in the non-pejorative sense to be pretense in the pejorative sense.

But we misunderstand the ironic movement if we think of Socrates as simply providing a revised set of criteria – for example, as arguing that a true doctor doesn't prescribe diet pills, but rather puts his patients on an exercise regimen. If this were all that were going on then the standard model of reflective endorsement would be adequate both for established practice and for the proposed Socratic revision. And this would be what was going on if Socrates had been an Aristotelian. That is, we begin with a practical identity such as *doctor*, and Socrates quickly links it to the human good. Why doctoring matters is that it is the capacity for and activity of promoting health in humans. Now if Socrates were an Aristotelian, the next step would be simply to determine the marks and features of human health. Socrates, by contrast, repeatedly declares his ignorance of what the good consists in. He knows that as he tries to articulate what human

10. For an excellent article on Socrates as shepherd, see R.L. BARNEY, "Socrates' Refutation of Thrasymachus", in G. SANTAS (ed.), *The Blackwell Guide to Plato's Republic*, Blackwell, Oxford 2006, 44-62.

virtue (or excellence) is – that capacity of the soul to orient and direct us toward the good – he will come to recognize a confusion or an *aporia* that he does not know how to resolve. This is not the sort of ignorance Socrates expects to overcome by asking a few more questions. Rather, Socrates’ profession of ignorance is his way of insisting upon the transcendence of the ideals in relation to which we organize (and create) specific forms of human life. His point is not that we inevitably fail to live up to the ideal. Rather, it is that our capacity even to understand the ideal is finite, subject to questioning, testing, and disruption in the name of that very ideal. This is not a problem we are some day going to get over. It is a constitutive moment in living a distinctively human life. And he took it to be a manifestation of his religious commitment to bring such a moment repeatedly to light (*Apology* 20e–23b; 28e–31a, 31d; 33c; 38a; 40a–b).

4. IRONIC CREATION

If we look to the ironic questions we can see that they establish two columns:

Teacher	Teacher
Christian	Christian
Jew	Jew
Doctor	Doctor
Politician	Politician
Shepherd	Shepherd
One who knows (sophist)	One who knows (sophist)
Student	Student
....
....
[Left]	[Right]

The left-hand column is formed from the first occurrence of the relevant term which expresses the meaning given by social practice – and variants upon it given by normal forms of reflection, introspection, criticism and so on. It is what we normally take ourselves to mean when we think of ourselves as being, say, a teacher or a student. It gives us the pretense

of teaching. In the right-hand column, there is the second occurrence of the same term, which invokes the ideal. But if we want to grasp the force of irony, we need to recognize that the second occurrence of the term cannot be *merely* the invocation of the ideal. For, as we have seen, the ideal or aspiration is itself something that is already understood in the meanings available in and through the available social practices. This is why the ironic question on its own is not sufficient for the experience of irony. It is possible to ask questions of precisely this form, using the very words –

Among all teachers is there a teacher?

Among all students is there a student?

– and remain within what I shall call the *left-column* meaning of that term. One could even go through the motions of setting up two columns via the form of an “ironic” question and nevertheless remain within the left-column meaning. So, for these two columns to establish a robust difference we must think of the ironic question *as asked in such a way as to provoke an experience of irony*. What, then, would it be to become a teacher or a student, that elusive inhabitant of the right-hand column? Perhaps by now it is not surprising that irony plays an essential role in the creation of such a person.

Let us consider the category of a student. It is difficult to say what the right-column meaning of such an existence category is, first, because everything one wants to say admits of interpretation that is appropriate to the left-column; second, because there is an evanescence to the right-column meaning that is difficult to capture in a straightforward description. It is although one already needs a capacity for irony to be able to grasp its creative force. The left-hand column is easy enough to establish: a *student* is someone who is enrolled in a recognized school. Now we might be tempted to think that if we add on a few conditions we can move on over to the right. But, as we shall see, the right-hand column is not the sort of thing that can be captured simply by trying to add necessary and sufficient conditions. *Everything is going to depend on how those conditions are themselves understood*¹¹. That is, one needs an ironic ear to hear the condi-

11. Of course, in some sense that is always true: in a moment of philosophical reflection one can always imagine a weird case in which someone systematically misinterprets

tions in the right sort of way. So, imagine trying to add conditions to the practical identity of student: a student in this deeper sense would be someone who takes on the life-task of becoming a person who is open to the lessons that the world, nature, others have to teach her. In so doing, she recognizes that the task is as never-ending as it is voracious. She may in fact direct her studies to this or that established area of research, but her identity as student is not exhausted by that commitment. Thus being/becoming a student in this sense is what contemporary philosophers call an infinite end¹². Obviously, satisfying these conditions takes one well beyond the run-of-the-mill student; but there are ways of doing it that remain within received understandings. Ditto if one tries to nail it down by adding that one needs to take individual responsibility for what all this consists in. These statements need not take one out of the realm of social pretense. Indeed, this is the language of social pretense when it comes to describing a serious and dedicated student. And yet they also seem to me to be the right sort statements to make.

One might think one could nail it down by adding more radical conditions. For example: the ideal of openness must include an openness to the possibility that all previously received understandings of what openness consists in themselves fall short of what openness really demands. And taking responsibility must consist in a willingness to orient oneself according to this revised understanding, regardless of what the social pretense recognizes or demands. But even these claims are open to left-handed interpretations. Thus one cannot capture the right-hand column *simply* by listing more conditions, no matter how right thinking they may sound.

The question thus becomes: how does one live with these conditions in the right sort of way? Perhaps, by now, it will not be a surprise to learn that one *becomes* a student in this elusive, yet significant, right-column sense by developing a capacity for irony with respect to one's own com-

conditions. The point here, by contrast, is that normal participants in an established form of life laying down conditions in a way that they take to be an instance of standard reflection will thereby miss the distinction they are purportedly attempting to capture.

12. S. RÖDL, *Self-consciousness*, Harvard University Press, Cambridge 2007, esp. 34-42, 81-83, 173-175.

mitments as a student. Thus far I have been examining the *experience* of irony but, as I said earlier, the *capacity* for irony is the capacity for inducing an experience of irony in oneself (or in another). Thus to become (and be) a student in this right-hand sense one must not only make the life-commitment to hold oneself open to the lessons the world (and others) make available; not only continually reflect on what such openness consists in and endeavor to shape and re-shape oneself to embody such openness; not only ward off the temptations to turn away from the world and close oneself off – but one must also be ready and able to disrupt ironically one’s achieved sense of what such openness consists in. The uncanny, erotic, ironic disruption of one’s living sense of openness to the world is itself a constituent moment of that openness.

Obviously, there is no reason to think that the capacity for irony on its own is a human virtue, or excellence. We are all familiar with “the ironist” who cleverly deploys his skills in non-excellent ways: for example, to remain disengaged with the world or to ridicule others, disrupting them in their own commitments. The deployment of irony can certainly be a vice. So, we need to know what, if anything, it would be to deploy the capacity for irony in the right sort of way. Is there any way that the capacity for irony might be a human excellence?

To understand how one might answer this question affirmatively, consider the modal structure of practical identity. To have a practical identity is in part to have a capacity for facing life’s possibilities. As a student, to continue with the example, I have the capacity to face what comes my way *as a student would*. In particular, I can rule out as impossible, acts that would be incompatible with being a student. Plagiarism, for example, is ruled out *as impossible* for a student (in this deeper sense): to commit such an act would be to give up on oneself as a student. Thus I have internalized an implicit sense of life’s possibilities, and have developed a capacity for responding to them in appropriate ways. This is what it is to inhabit a world from the perspective of a practical identity. In normal circumstances, this capacity for dealing with life’s possibilities is an inheritance from, an internalization of, available social practices. I learn how to be a student from people I take to be student and, in the first instance, I take society’s word for who the students are. Obviously, as I develop, I may subject various norms to reflective criticism: that is part

of my development as a student. This reflection may well deepen me in significant ways. By contrast, ironic disruption this normal development: it disrupts one's internalized sense of life's possibilities. This is not one more possibility one can simply add to the established repertoire. It is a disruption of the repertoire – and, in the disruption, brings to light that the established repertoire is just that.

Ironic existence is the term Kierkegaard gave to the capacity of soul in which irony functions as a virtue. In ironic existence, I would have the capacity both to live out my practical identity as a student – which includes calling it into question in standard forms of reflective criticism – *and* have a capacity to call all of that into question; not via another reflective question, but rather via an ironic disruption of the whole process. In this twofold movement I would both be manifesting my best understanding of what it is about being a student that makes it a human excellence *and* giving myself a reminder that this best understanding itself contains the possibility of ironic disruption. Done well, this would be a manifestation of a practical understanding of one aspect of the finiteness of human life and understanding: that our understanding of the concepts with which we live our lives has a certain vulnerability built into it. Ironic existence thus has a claim to be a human excellence because it is a form of truthfulness. It is also a form of self-knowledge: a practical acknowledgement of the kind of knowing that is available to creatures like us.

SOMMARI

Esiste un'esperienza che avviene come *interruzione* della conoscenza pratica che un soggetto ha di sé e del proprio compito: tale momento è l'esperienza dell'ironia. Intesa in senso filosofico, essa è altra cosa rispetto al modo comune di intenderla, ovvero come disinteresse o distacco verso la realtà. Infatti, l'ironia interrompe la struttura dell'identità pratica di una persona, creando così una rottura all'interno delle capacità acquisite di affrontare le possibilità della vita e aprendo il cammino verso l'ideale a cui si aspira. L'ironia diventa un segno di serietà e di fedeltà alla propria identità. Per vivere tale esperienza, il soggetto deve essere *capace* di ironia: solo in questo modo la sua vita può diventare un'*esistenza ironica*, che possiede la qualità di eccellenza: essa è allo stesso tempo capacità di

portare a termine la propria identità pratica e di mettere in questione il proprio modo di farlo, aprendo la persona alla finitezza della vita umana e della propria capacità di comprensione.

An experience exists that takes place as interruption of the practical knowledge that a subject has in itself and of one's own task: such a moment is the experience of irony. Understood in the philosophical sense, it is the other thing respect to the common way of understanding it, or to be more precise as disinterest or detachment toward reality. In fact, the irony interrupts the structure of the practical identity of a person, while creating in this way a break to the inside of the acquired capacities to affront the possibilities of life and opening the path toward the ideal to which one aspires. The irony becomes a sign of seriousness and of fidelity of one's own identity. To live such a experience, the subject must be capable of irony: only in this way does its life can become a ironic existence, that possesses the quality of excellence: it is at the same time to carry to the end one's own practical identity and to put into question one's own way to do it, while opening the person to the finiteness of the human life and one's own capacity of comprehension

Il existe une expérience qui arrive comme *interruption* de la connaissance pratique qu'un sujet a de lui et de son propre devoir: une telle expérience est celle de l'ironie. Au sens philosophique du terme, l'ironie ne suit pas la définition commune, ou celle du désintéret ou du détachement avec la réalité. En effet, l'ironie interrompt la structure de l'expérience pratique d'une personne, en créant ainsi une rupture à l'intérieur des capacités acquises pour affronter les possibilités de la vie et pour ouvrir le chemin vers l'idéal auquel la personne aspire. L'ironie devient un signe de sérieux et de fidélité à la propre identité. Pour vivre une telle expérience, le sujet doit être *capable* d'ironie: seulement ainsi, sa vie peut devenir une *existence ironique*, qui possède la qualité d'excellence: elle est en même temps capable de porter à terme la propre identité pratique et de remettre en question le mode même pour le faire, ouvrant la personne à la finitude de la vie humaine et de la propre capacité de compréhension.

Hay una experiencia que interrumpe el conocimiento de sí y del propio deber, esa experiencia es lo que llamamos ironía. En sentido filosófico adquiere otro

significado respecto al modo común de entenderla, es decir, como distanciamiento de la realidad. La ironía irrumpe en la identidad práctica de la persona, creando una ruptura en la capacidad de afrontar las posibilidades de la vida y abriendo el camino hacia el ideal al que se aspira. Así la ironía se convierte en un signo de seriedad y de fidelidad a la propia identidad. Para ello el sujeto debe ser capaz de afrontar las cosas con ironía, sólo de ese modo su vida puede convertirse en una existencia irónica, poseyendo la cualidad de la excelencia: al mismo tiempo capacidad de cumplir la propia identidad práctica y de cuestionarse sobre el modo de llevarlo a cabo. Se abre así la persona a la finura de la vida humana y de la propia capacidad de comprensión.

Existe uma experiência que acontece como *interrupção* da consciência prática que um sujeito há de si do próprio encargo: tal momento é a experiência da ironia. Entendida em sentido filosófico, o seu significado é diverso do modo comum de entender-la, ou seja, como desinteresse ou separação verso à realidade. De fato, a ironia interrompe a estrutura da identidade prática de uma pessoa, criando assim uma rotura ao interno das capacidades adquiridas para enfrentar as possibilidades da vida e abrindo o caminho verso o ideal ao qual se aspira. A ironia torna-se um sinal de seriedade e de fidelidade para a própria identidade. Para viver tal experiência, o sujeito deve ser capaz de ironia: somente neste modo a sua vida pode evitar uma *existência irônica*, que possui a qualidade de excelência: essa é ao mesmo tempo capacidade de portar a termo a própria identidade prática e de colocar em questão o próprio modo de fazê-lo, abrindo a pessoa ao cumprimento da vida humana e da própria capacidade de compreensão.

CRONACA TEOLOGICA

**L'azione, fonte di novità. Teoria dell'azione e compimento della persona: ermeneutiche a confronto
(X Colloquio di Teologia Morale - Roma, 20-21 novembre 2009)**

JUAN JOSÉ PÉREZ-SOBA * – ELEONORA STEFANYAN **

«ECCO, IO FACCIO NUOVE TUTTE LE COSE»

«Ecco, io faccio nuove tutte le cose» (*Ap* 21,5). Questa affermazione dell'Apocalisse permette di guidare la speranza degli uomini verso il rinnovamento divino ultimo, quello in cui, come dice San Paolo «Dio sarà tutto in tutti» (*1Co* 15,28). La novità assoluta che emana dalla creazione divina appare, ancora una volta, radicalmente “rinnovata” da un'azione divina finale. Questo evento descrive la dinamica intima di un cosmo internamente volto ad una nuova azione, mediante la quale può raggiungere la pienezza a cui Dio lo chiama. Inoltre, l'attribuzione dell'agiografo a “colui che era seduto sul trono”, l'“Alfa e l'Omega, il principio e il fine” indica, in ultima analisi, il modo in cui tale fine è unito all'azione di un uomo: Cristo.

Questa stupefacente glorificazione dell'umanità risulta impossibile da compiere se non si comprende il dinamismo interno dell'azione umana. In

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esso, l'uomo vive una sorprendente apertura radicale verso una pienezza che sperimenta con una profonda novità, in cui egli stesso è rinnovato.

Questo è il contenuto fondamentale del Colloquio organizzato a Roma dall'*Area Internazionale di Ricerca in Teologia Morale* il 20 e 21 novembre 2009. L'incontro ha inteso approfondire così questo tema, adottando la frase pronunciata dall'allora Cardinal Ratzinger, in cui affermava che il tema essenziale di qualsivoglia morale cristiana è quello di considerare: «la collaborazione dell'agire umano e dell'agire divino nella realizzazione piena dell'uomo»¹.

1. UNA LUCE SUL MISTERO PERSONALE

Avvicinarsi all'azione umana significa entrare in un mistero legato all'identità personale; pertanto, per riuscire a percorrere il cammino della sua conoscenza è utile disporre di un aiuto. Abbiamo dunque cercato il sostegno di alcuni autori che ci serviranno da guida in questi percorsi difficili. Nell'ambito del ventesimo secolo, abbiamo rinvenuto alcuni pensatori che hanno preso sul serio il tema dell'azione come un cammino privilegiato per scoprire la verità sull'uomo. Si è trattato di un approccio necessario poiché l'atto umano era sovente messo in discussione in alcune delle sue dimensioni essenziali, in particolare da una corrente scienziata che tendeva a smarrire la specificità dell'azione dell'uomo, considerandola unicamente a partire dalla sua efficienza esteriore. La questione drammatica dell'alienazione, che è stata fondamentale nell'ottocento, rappresentava, in quel periodo, una grande difficoltà rispetto ad un uomo minacciato di essere valutato soltanto a partire da elementi esteriori di una *praxis* assimilata, come una fabbricazione di prodotti o come la possibilità di causare un evento nel mondo, misurabile esclusivamente dalle sue conseguenze. In ogni caso, si tendeva a celare la dimensione personale del soggetto che agisce, facilitandone la manipolazione.

Questa materializzazione dell'azione esterna avveniva parallelamente ad una assolutizzazione estetica dell'azione interiore dell'uomo, basata su

1. J. RATZINGER, *La via della fede. Saggi sull'etica nell'epoca presente*, Edizioni Ares, Milano 1996, 96.

una prospettiva romantica. Un certo spiritualismo aveva impedito di scoprire le dimensioni autenticamente umane dell'agire, a vantaggio di una sorta di azione angelica simile al *faktum* kantiano come atto di coscienza fuori dal tempo e dallo spazio.

2. IL RINNOVAMENTO DELLA VERITÀ DELL'UOMO NELL'AZIONE

Il primo passo che abbiamo compiuto nell'ambito del nostro Colloquio, è stato volto ad affrontare la determinazione della condizione umana e personale dell'azione. Lo abbiamo fatto ricorrendo a tre autori che hanno preso in considerazione l'importanza decisiva dell'azione affinché l'uomo possa scoprire il proprio mistero, la sua identità personale.

Così, in primo luogo, ci siamo avvicinati alla splendida testimonianza di Emmanuel Mounier. Il Professor Juan José Pérez-Soba della Facoltà di Teologia "San Dámaso", si è concentrato sul concetto di "prova" della persona, che il pensatore francese adopera per affrontare lo studio dell'azione nel suo libro *Trattato sul carattere*². Dopo aver inquadrato la corrente personalista come una "difesa della persona", in un mondo diviso tra l'individualismo liberale e i collettivismi di vario genere, l'autore francese si inserisce nella relazione che esiste tra l'azione e le dimensioni tipiche della persona umana come, ad esempio, il coinvolgimento personale (*engagement*), la libera responsabilità, l'incarnazione o la corporeità, la vocazione e la comunione. Nella misura in cui il filosofo di Grenoble considera l'amore come l'atto fondamentale dell'uomo, emerge chiaramente l'importanza della fedeltà come espressione della temporalità dell'azione con un riferimento personale. Tutto questo illustra il modo in cui la prova dell'uomo consiste nel fatto che solo nell'azione egli trova la propria identità, in riferimento ad una comunione di persone. Infine, la trascendenza che presiede a tutto il suo pensiero ci conduce alla categoria della *testimonianza*, in particolare quando l'uomo sperimenta il dolore e la sofferenza; soltanto in queste prove la persona umana raggiunge tutto il suo significato, rivolto verso Colui che gli promette un destino, una pienezza finale.

2. Cfr. E. MOUNIER, *Traité du caractère*, Éditions du Seuil, Paris 1947².

Nell'ambito di una certa tradizione personalista, il Professor Maurizio Chiodi, della Facoltà di Teologia dell'Italia Settentrionale, ci ha introdotti nel pensiero complesso e profondo di Paul Ricoeur, nell'idea dell'*identità narrativa*. Per riuscirvi, si è basato sul pensiero maturo del filosofo, espresso nel libro *Soi-même comme un autre*³. Egli ha mostrato come da un'analisi attenta e misurata degli elementi chiave del suo pensiero, si evince il modo in cui l'identità dell'uomo è unita alla direzione delle azioni umane, di cui è *soggetto*. Questa dimensione necessita di una identità personale (il se stesso, *l'ipse*) e non può essere limitata ad una mera individualità autoreferenziale (basata su una certa uguaglianza formale, *l'idem*). Nelle azioni emerge dunque l'esistenza di un *senso* che consente una certa unità tra queste, e che risponde al quesito fondamentale, ossia "Chi sono io?". Da qui deriva l'aspetto decisivo di una ermeneutica che ci permetta di scoprire il modo in cui si possono interpretare le esperienze umane che costituiscono i significati fondamentali della vita. In particolare, emerge la singolarità della dinamica degli affetti che rimandano ad una relazione specifica tra ricevere ed agire. In definitiva, l'azione mira ad una certa totalità di vita ed esige la *temporalità* essenziale dell'azione, nell'ambito di un sistema di relazioni intersoggettive. Questa presentazione del professor Chiodi ha sfociato in una critica personale in cui si valutava il contributo integrativo di Ricoeur, sebbene non sia esente da tentennamenti al momento di determinare l'aspetto normativo della morale ed il ruolo dell'amore nell'azione umana. Queste carenze sono apparse con maggior evidenza all'interno del ricco dialogo che ha seguito la sua presentazione.

Nell'ultima parte della prima sessione, non poteva mancare una relazione su Karol Wojtyła che ha, come fulcro del suo pensiero, la questione dell'*actus personae*, vale a dire il modo in cui l'azione rivela la persona e le sue dimensioni. Per presentarla, il Professor Alfred Wierzbicki dell'Università Cattolica di Lublino, si basava sull'opera principale del filosofo polacco, *Persona e atto*⁴ e sugli articoli che successivamente la sviluppano. Tra le dimensioni dell'azione che propone Wojtyła, si è scelta quella dell'au-

3. Cfr. P. RICOEUR, *Soi-même comme un autre*, Éditions du Seuil, Paris 1990.

4. Cfr. K. WOJTYŁA, *Persona e atto*, in ID., *Metafisica della persona. Tutte le opere filosofiche e saggi integrativi*, Bompiani, Milano 2003, 829-1216.

todeterminazione della persona come nucleo dell'operare umano, poiché in essa si osserva la relazione intrinseca tra la persona e il suo atto libero. Si addentra così nel rapporto interno e dinamico che si verifica nell'atto della persona, tra l'autodominio, l'autoteologia e l'autodeterminazione. La posizione della persona come fine e confine della sua azione, diventa ora il luogo in cui si palesa la sua dignità in un ambito di trascendenza che scongiura qualsiasi immanentismo di taglio kantiano. Da questa prospettiva, si può parlare con cognizione di causa, di una "verità del bene", legata alla modalità di costruzione dell'atto umano in quanto intenzionale. La riflessione del Professor Wierzbicki ha terminato con una considerazione sull'articolo: «Il problema del costituirsi della cultura attraverso la prassi umana»⁵ mediante i valori interiori che si esplicano nell'atto della persona in relazione con la società. Questa dimensione, personale e nel contempo comunitaria, è stata riaffermata e completata con svariate sfumature durante l'interessante dibattito che ha seguito la presentazione.

3. LA DRAMMATICA DELLA REALIZZAZIONE DELLA PERSONA UMANA NELLA SUA AZIONE

Per non perdere la prospettiva fondamentale del nostro intento, ossia quella di scoprire la *novità* dell'azione umana, è necessario comprendere in che modo in essa si gioca la dignità della persona. Si tratta di un tema talmente rilevante da essere stato spesso riformato durante il XX secolo, attraverso una serie di proposte. La ragione è da ricercare nelle disastrose conseguenze sociali derivanti dalla tendenza a dimenticare la specificità dell'azione umana e dall'influenza perniciosa delle varie riduzioni. Alcuni autori hanno dunque affrontato il tema adottando la prospettiva secondo cui, nella sua azione, l'uomo coinvolge se stesso in quanto persona e, di conseguenza, il risultato di questa non è mai qualcosa di esterno alla persona, ma implica il soggetto agente nel più profondo di se stesso. Si tratta di una dimensione di una ricchezza tale da poter essere presa in esame partendo da vari punti di vista.

5. Cfr. ID., "Il problema del costituirsi della cultura attraverso la *praxis* umana", in ID., *Metafisica della persona*, cit., 1447-1461.

Questo è quello che abbiamo fatto nell'ambito del nostro Colloquio, nel quale si sono confrontate prospettive diverse, che però hanno in comune la medesima intenzione di fondo: scoprire quanto di squisitamente umano c'è nel cuore dell'azione.

In questo senso, una particolare collocazione è attribuita, a giusto titolo, a Maurice Blondel⁶, vero pioniere di questi studi sull'azione. Egli affronta l'argomento con un vastissimo bagaglio intellettuale, in un momento in cui l'azione umana era separata da qualsivoglia impostazione filosofica e relegata all'ambito della psicologia. Il Professor Giuseppe Mazzocato della Facoltà di Teologia del Triveneto ci ha presentato, in maniera sintetica ma con grande rigore ed esattezza, un'analisi approfondita del pensatore francese. Egli ha adottato la prospettiva del superamento che Blondel intende realizzare dell'approccio kantiano e di quello empirista partendo da una fenomenologia specifica – poiché è così che la si può definire – che parte dai determinismi materialisti per raggiungere la libertà e che spiega anche come la libertà si inserisce nella dinamica fisiologica dell'atto. In questo duplice movimento, si produce una progressiva unificazione dell'“io”, ossia del soggetto che agisce e che percepisce così il senso della propria vita. Inserendosi nella dinamica interna della volontà mossa dal desiderio, il Professor Mazzocato ci ha consentito di scoprire, sebbene sia un aspetto apparentemente disperso nell'opera di Blondel, il valore distintamente morale dell'azione, come qualcosa di insito nella sua specifica verità. Egli ha chiarito dunque il modo in cui, a partire da un certo obbligo di agire ontologico, si scoprono le norme morali senza perdere la verità singolare della persona in azione e adottando una percezione aperta ad un certo riconoscimento psicologico. Nel dialogo successivo, si è potuta verificare l'ampiezza del pensiero del filosofo francese, in particolare per quanto riguarda gli affetti e il valore del sacrificio nella vita cristiana.

Mediante un audace confronto iniziale con Hannah Arendt, il Professor Stephan Kampowski della sezione centrale del Pontificio Istituto Giovanni Paolo II per Studi su Matrimonio e Famiglia, ha presentato il particolare concetto di azione di Jürgen Habermas. Con questo approc-

6. Cfr. M. BLONDEL, *L'Action. Essai d'une critique de la vie et d'une science de la pratique*, in ID., *Œuvres complètes, I: 1893 Les deux thèses*, Presses Universitaires de France, Paris 1995.

cio iniziale, egli riesce a non cadere nel senso meramente procedurale con il quale si potrebbe interpretare l'“agire comunicativo” che il filosofo tedesco ha utilizzato come fulcro della propria proposta etica⁷. Il Professor Kampowski dialoga dunque con le posizioni ultime di questo autore, partendo dalla preoccupazione dovuta ad alcune concezioni moderne della bioetica, che considera altamente lesive della dignità umana⁸. Mediante l'analisi delle condizioni precedenti ad una azione comunicativa, vale a dire che deve essere *veritiera, corretta e sincera*, si scopre il modo in cui si intrecciano delle sfere umane estremamente significative, come il *mondo oggettivo* dei fatti, il *mondo sociale* o interumano e il *mondo soggettivo* delle convinzioni personali. Questo insieme mette in risalto una serie di elementi concreti che consentono di riformulare l'imperativo universale kantiano in seno ad una situazione “attuale” di comunicazione intersoggettiva. In questo modo, Habermas fornisce un'argomentazione etica trascendentale e nel contempo pragmatica, con la difficoltà di assumere contemporaneamente l'emarginazione della questione del bene a favore del primato della giustizia. Malgrado i limiti imposti dall'approccio iniziale, il filosofo è in grado di determinare la questione etica fondamentale nel quesito che si rivolge il soggetto agente: «Perché devo essere morale?»⁹. La profondità della domanda si può constatare nelle argomentazioni addotte contro l'eugenetica che necessariamente emana dai ragionamenti puramente liberali. In questo dibattito, Habermas intende giungere al cuore dell'identità umana che comprende un corpo e la sua progressiva costituzione come elemento dotato di una dignità radicale, poiché risponde alla domanda sul “chi è?”. Questa presentazione così suggestiva ha alimentato un dialogo molto interessante circa i limiti di qualsiasi etica del discorso in riferimento alle gravi carenze della sua posizione iniziale.

Infine, il Colloquio ha avuto la fortuna di poter godere di una testimonianza singolare: quella di una figlia che parla dell'eredità ricevuta da sua madre. Con la forza del suo racconto e la fermezza dei concetti

7. Dalla sua opera fondamentale: J. HABERMAS, *Theorie des kommunikativen Handelns*, Suhrkamp, Frankfurt a.M. 1981.

8. In particolare nell'opera: ID., *The Future of Human Nature*, Polity Press, Cambridge 2003.

9. *Ibidem*, 4.

esposti, la Dottoressa Mary Geach di Oxford ci ha presentato l'importante teoria dell'azione sviluppata da sua madre Elisabeth Anscombe. La filosofa analitica, discepola diretta di Ludwig Wittgenstein, ci offre un'attenta analisi del termine *good* che, nella sua valenza realmente umana, può essere riferito soltanto all'azione in quanto può essere definito da un'*intenzione*¹⁰. La sua analisi inizia con la spiegazione della definizione della *verità pratica* di Aristotele, in quanto «conformità all'appetito retto»¹¹, comprensibile soltanto se si adotta una proposta il cui argomento sia un'azione. A partire da questo quadro ermeneutico, la Dottoressa Geach ha asserito che l'aggettivo *good* non è ambiguo e che può essere definito, per quanto riguarda la *praxis* in quanto è intenzionale, come un atto interno della volontà che risponde alla domanda *why?*¹² In questo modo, si disegna un sistema molto diverso di quello dell'osservatore imparziale humaniano. È così che la Anscombe ci introduce nella qualificazione morale degli atti e nella ricerca sulla virtù in relazione con i fini generici e la totalità della vita umana. Nel dibattito che ha seguito la presentazione, la Professoressa ha illustrato degli esempi molto concreti circa la qualificazione del bene in senso pratico.

4. LA DIMENSIONE AUTENTICA DELL'AZIONE: LA SINERGIA TRA DIO E L'UOMO

L'ultima visione sull'azione non poteva essere altro che teologica. In fondo, fatta eccezione per Habermas, gli altri filosofi precedentemente analizzati hanno un rapporto più o meno diretto con la teologia. Di fatto, la considerano come una prospettiva ultima per l'azione umana, che deve comunque sempre essere tenuta in considerazione. In particolare, la valenza interpersonale che questi autori hanno messo in luce, raggiunge un valore nuovo nella misura in cui l'uomo si relaziona con Dio in una comunicazione attiva.

Non si tratta di considerare questo come una semplice possibilità, al contrario, per poter trattare questo argomento è necessario inserirsi

10. Cfr. G.E.M. ANSCOMBE, *Intention*, Basil Blackwell, Oxford 1957.

11. ARISTOTELE, *Etica Nicomachea*, I, 6, c. 2 (1139a30-31).

12. Come spiega ANSCOMBE, *Intention...* cit., 9, n. 5.

in una determinata Tradizione. Un popolo ben definito, quello di Israele, ha scoperto, lungo la sua storia, l'azione indubbia di un unico Dio, che lo ha costituito come popolo mediante l'Alleanza. Da qui scaturisce una percezione nuova degli elementi fondamentali dell'azione umana, il cui vertice è l'affermazione secondo cui «Dio è amore» (1Gv 4,16). La rivelazione di Dio per mezzo dell'amore di Cristo diventa così il luogo ermeneutico dell'azione umana, che deve nascere come risposta a questo Amore donato. Vero è che non sempre gli autori cristiani classici hanno illustrato la questione dell'azione umana; ciononostante non possiamo cessare di prendere in esame il coraggioso contributo che alcuni di loro hanno fornito.

4.1 *La luce della ragione illuminata dal volto di Cristo*

Uno dei principali testimoni che dispone di una vera e propria teologia dell'azione è San Tommaso d'Aquino. Soltanto basandosi su questa dottrina si può spiegare la struttura interna della *Summa Theologiae* che dedica una parte specifica alla morale definita come «*motus rationalis creaturae in Deum*»¹³. Il senso autentico di questa affermazione emerge dalla specifica concezione dell'azione umana offerta dall'Aquinate¹⁴, sostenuta dalla comunicazione divina che realizza la carità e, in quanto virtù teologale e umana, è principio delle azioni umane con un valore salvifico.

La grandissima novità fornita dal Dottor Angelico in questo argomento costringeva a concentrarsi su un aspetto concreto della questione. Così, nel nostro Colloquio, la presentazione del tema si è orientata verso l'attualissima questione della legge naturale, per opera del Professor Martin Rhonheimer della Pontificia Università della Santa Croce¹⁵. Adottando il massimo rigore concettuale possibile, il Professore si è adoperato per chiarire il significato di legge naturale nell'Aquinate come *una modalità*

13. Cfr. SAN TOMMASO D'AQUINO, *Summa Theologiae*, I, q. 2, Prol.

14. Cfr. G. ABBÀ, *Lex et virtus. Studi sull'evoluzione della dottrina morale di san Tommaso d'Aquino*, LAS, Roma 1983.

15. Già in precedenza aveva trattato largamente il tema in: M. RHONHEIMER, *Natur als Grundlage der Moral. Die personale Struktur des Naturgesetzes bei Thomas von Aquin: Eine Auseinandersetzung mit autonomer und teleologischer Ethik*, Tyrolia Verlag, Innsbruck-Wien 1987.

di conoscenza e non come un oggetto da conoscere. Mediante una precisa esegesi dei testi tomisti in merito, egli ha mostrato in che modo questa luce naturale che ci permette di discernere il bene delle azioni, altro non è che una partecipazione alla luce divina che ordina tutto il creato verso il suo fine. In questo modo, si è potuto determinare l'aspetto essenziale di questa proposta mediante la formula "teonomia partecipata" così come è stata definita in *Veritatis splendor*¹⁶, nonché chiarire gli errori commessi dalla «autonomia teonoma» così come presentata da alcuni autori moralisti contemporanei. Se è vero che per la dottrina dell'Angelico si può parlare di una certa "autonomia", lo è nel senso della conoscenza che parte dal soggetto agente, e non della volontà e della decisione, come invece sostiene Kant. Partendo da questo primo chiarimento, il Professore svizzero entra in alcune questioni su come –nonostante la legge naturale sia una specifica modalità della provvidenza divina verso l'uomo – non sia necessario che l'uomo, nel suo agire, si riferisca esplicitamente a Dio affinché la legge naturale che lo illumina sia una luce che partecipa a quella divina. Con questa considerazione, egli spiega il modo in cui questa luce permane in ogni uomo, come una legge interiore.

Nel dibattito successivo, si è trattata la questione della condizione di questa legge naturale in riferimento alla legge nuova, del ruolo della conoscenza da parte dello Spirito e delle sue fonti teologiche. È emerso dunque il ruolo centrale del riferimento che San Tommaso fa del Salmo quarto, quando parla della legge naturale come luce¹⁷ e che identifica come riferimento ultimo chiaramente cristologico¹⁸. Da questo dibattito

16. Cfr. GIOVANNI PAOLO II, Lettera enciclica *Veritatis splendor*, 6 agosto 1993, n. 41. Per l'"autonomia teonoma" cfr. *ibidem*, nn. 36-41.

17. Cfr. *STh.*, I-II, q. 91, a. 2: «Unde cum Psalmista dixisset (*Ps* 4,6), "Sacrificate sacrificium iustitiae", quasi quibusdam quaerentibus quae sunt iustitiae opera, subiungit: "Multi dicunt: Quis ostendit nobis bona?" cui quaestioni respondens, dicit: "Signatum est super nos lumen vultus tui, Domine:" quasi lumen rationis naturalis, quo discernimus quid sit bonum et malum, quod pertinet ad naturalem legem, nihil aliud sit quam impressio divini luminis in nobis. Unde patet quod lex naturalis nihil aliud est quam participatio legis aeterna in rationali creatura».

18. Come si evince dall'affermazione seguente: Cfr. SAN TOMMASO D'AQUINO, *Super Ioannis Evangelium*, c. 1, lec. 3 (n. 101): «Potest etiam dici lux hominum participata. Numquam enim ipsum Verbum et ipsam lucem conspiceri possemus nisi per participationem eius, quae in ipso homine est, quae est superior pars animae nostrae, scilicet lux intellectiva, de qua dicitur in *Ps* IV,7: "signatum est super nos lumen vultus tui", idest Filii tui, qui est facies tua, qua manifestaris».

scaturirebbe una necessaria visione teologica della legge naturale nel suo rapporto intrinseco con la legge nuova.

4.2. *La sinergia dello Spirito e l'azione Eucaristica*

Possiamo dire che l'autore patristico che ha approfondito con maggior enfasi l'analisi dell'atto umano è stato San Massimo il Confessore. Nell'ambito della disputa monotelita, egli non si presenta semplicemente come il principale difensore della volontà umana di Cristo, ma considera l'azione di Cristo uomo, come il luogo in cui si rivela la pienezza dell'azione umana in quanto tale. Il contributo del Dottor Luis Granados, della sezione centrale del Pontificio Istituto Giovanni Paolo II per Studi su Matrimonio e Famiglia è stato volto ad introdurci nel pensiero ricco e complesso di questo monaco del VII secolo. La prospettiva che ci ha aperto è stata direttamente trinitaria, nel mistero di ἀγάπη che Dio vive in sé e che comunica all'uomo affinché vi partecipi. Il Dottor Granados ci presenta l'azione dell'uomo come una sinfonia che realizza insieme allo Spirito di Dio. Il principio di questa è l'ordine interno delle missioni divine descritto da San Massimo come tre voci armonicamente unite e caratterizzato come segue: «uno per l'*eudokia*, l'altro per la *sinergia* e l'altro per l'*autourgia*»¹⁹. La comunicazione con l'uomo nata dalla *filantropia* avviene così mediante l'Incarnazione. «Dio vuole sempre e in tutti gli uomini attuare il mistero della sua Incarnazione»²⁰. Se questa è la fonte dell'azione, non possiamo perdere il senso della dinamica interna che la anima e che progredisce insieme alla creazione. Qualsiasi creatura ha tre livelli rispetto all'azione: l'atto di essere, quello di essere buona e quello di essere sempre, che definisce come il riposo in Dio. L'azione dell'uomo si colloca dunque nel passaggio tra il primo e l'ultimo atto, e si basa sulla propria logica che scaturisce dalla presenza di un dono primigenio. È in questo dinamismo che si inserisce la novità dell'azione di Cristo che, in quanto uomo, segue

19. Cfr. SAN MASSIMO IL CONFESSORE, *Quaestiones ad Thalassium*, 60 (PG 90, 624 B): «ὁ μὲν εὐδοκῶν, τὸ δὲ σύνεργον, αὐτουργοῦντι τῷ Υἱῷ τὴν σάρκωσιν».

20. SAN MASSIMO IL CONFESSORE, *Ambigua*, 7 (PG 91,1084 C-D): «Βούλεται γὰρ ἀεὶ καὶ ἐν πᾶσιν ὁ τοῦ Θεοῦ Λόγος καὶ Θεὸς τῆς αὐτοῦ ἐνσωματώσεως ἐνεργεῖσθαι τὸ μυστήριον».

il λόγος umano, ma nel quale esprime il proprio *modo* (τρόπος) di essere personale che è divino e che permette una *pericoresi* tra l'umano e il divino. L'uomo, mediante lo Spirito, prende parte a questa novità di Cristo, fino alla sua completa divinizzazione.

La profonda visione teologica dell'azione che ci ha mostrato il Confessore e che influenza San Tommaso d'Aquino²¹ non è sufficientemente nota, ma anche ora troviamo un autore che ha voluto comprendere le profonde implicazioni teologiche che si scoprono nell'azione. Il Professor Nicholas J. Healy della sezione di Washington del Pontificio Istituto Giovanni Paolo II per Studi su Matrimonio e Famiglia, ci ha presentato il magnifico panorama disegnato da Hans Urs von Balthasar nella sua monumentale opera *Teodrammatica*. Il teologo svizzero parte, anch'egli, da una visione profondamente Trinitaria, in cui incorpora un'unione radicale tra la dinamica delle processioni e delle missioni a partire dal concetto di amore come *dono di sé*. Ne deriva dunque una concezione dell'essere della creazione come dono che conferisce al cosmo una entità circa il suo essere buono e in cui la libertà finita umana esiste in rapporto con la libertà infinita di Dio. È così che si apre uno spazio per la soggettività umana, la cui azione non può essere dedotta dalle inclinazioni naturali e necessita della dimensione della vocazione divina per dare un senso alla propria esistenza nella sua personale espressione. La prospettiva teologica che assume, consente di scoprire l'identità dell'essere della persona nell'incontro con Cristo, che è dunque la norma concreta ed universale dell'azione umana²². Questa logica di un'esistenza che nasce dal dono, si comunica come dono e chiama al dono di sé, consente di aprire una riflessione nuova sull'Eucaristia, in cui si concentrano e si realizzano tutte le dimensioni proposte in precedenza. Non possiamo fare a meno di ricordare che, a proposito di questo tema, von Balthasar riprende alcune note del pensiero di San Massimo, da cui trae ispirazione²³.

21. Cfr. R.-A. GAUTHIER, "Saint Maxime le Confesseur et la psychologie de l'acte humain", in *Recherches de Théologie Ancienne et Médiévale* 21 (1954), 51-100.

22. Cfr. H.U. VON BALTHASAR, *Nove tesi sull'etica cristiana*, in J. RATZINGER – H. SCHÜR-MANN – H.U. VON BALTHASAR, *Prospettive di morale cristiana. Sul problema del contenuto del fondamento dell'ethos cristiano*, Città Nuova Editrice, Città del Vaticano 1986, 60-63.

23. Cfr. VON BALTHASAR, *Kosmische Liturgie. Das Welbild Maximus' des Bekenners*, Johannes Verlag, Einsiedeln-Trier 1988³.

5. UN CAMMINO PIENO DI LUCE

Abbiamo percorso un bellissimo cammino, guidati da alcuni testimoni privilegiati della novità contenuta nell'atto umano. In questo modo, si è aperto dinanzi a noi un panorama di grande bellezza, in cui la persona umana vive l'eco della meravigliosa novità della creazione come un richiamo a raggiungere il rinnovamento ultimo che comporta la partecipazione alla gloria divina in Cristo risorto. È qui che si svela la stupefacente *sinergia* tra l'uomo e Dio, che soggiaceva all'intento di base di queste riflessioni. Possiamo dunque osservare che, attraverso i contributi offerti in questo Colloquio, si è potuto abbozzare una prima risposta a questo quesito.

L'intero contenuto di questo Colloquio può essere considerato come un ulteriore passo avanti in questo cammino di riflessione, che consente di approfondire, sotto questa luce potente, la comprensione dell'uomo mediante la sua azione, poiché «chi mette in pratica la verità viene alla luce, affinché le sue opere siano manifestate, perché sono fatte in Dio» (*Gv* 3,21). La comprensione delle dimensioni personali dell'azione umana partendo da un disegno di Dio che intende comunicargli la pienezza della vita, serve dunque come luce che consente alla persona umana di orientarsi nel cammino che Dio ha disegnato per lui. Soltanto assumendo interamente questa verità si può concepire una morale fondata sul valore personale degli atti e nella sua trasformazione in Cristo. Tutti questi elementi debbono essere considerati uno stimolo per portare avanti una riflessione più profonda su quanto ci è stato rivelato come luogo ermeneutico eccezionale della presenza divina nell'uomo.

Soltanto così, prendiamo parte a quanto c'è di più radicale nel nostro essere e assimiliamo la novità più profonda del dono di Dio contenuto nell'espressione definitiva di Cristo: «le cose vecchie sono passate: ecco, sono diventate nuove» (*2Co* 5,17).

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