

A personalist-phenomenological model of general resurrection in light of current science and medicine

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Introduction

How are we to understand the doctrine of general resurrection in the 21st century? Paul proclaims the centrality of general resurrection in language which is no less logical than it is uncompromising (1 Corinthians 15:12-19). The Catholic Catechism re-iterates Paul's affirmation declaring that '*The Christian Creed - the profession of our faith in God, the Father, the Son, and the Holy Spirit, and in God's creative, saving, and sanctifying action - culminates in the proclamation of the resurrection of the dead on the last day and in life everlasting.*'¹ Given the centrality of the doctrine of general resurrection to the Christian faith and Aquinas' dictum that only the false is contrary to the true, it is important to have, in every age, theologically, philosophically and scientifically coherent and informed conceptions of human personhood and mind-brain relationship that are faithful to the Christian doctrine *and* compatible with demonstrated findings of science, if we are to '*be ready to make your defense to anyone who demands from you an accounting for the hope that is in you.*' (1 Peter 3:15)²

This paper sets out to formulate one such conception in the tradition of faith seeking understanding by examining what the theological doctrine of general resurrection may mean given modern scientific and medical knowledge and how they can be combined in a philosophically coherent conception in this theological inquiry which respects the domain-specific competencies of the relevant disciplines with particular reference to Pauline corpus. I try to '*specify the conditions that must obtain in order for bodily resurrection to be metaphysically and theologically feasible. This task leaves room for creativity to develop different sorts of models which meet these conditions. Such models indicate that an informative defense of the doctrine of resurrection is available even though we are not in a position to specify which mechanisms God actually uses for raising us from the dead.*'³

¹ Catechism of the Catholic Church (1993), §991, §988,
<http://www.vatican.va/archive/ENG0015/_INDEX.HTM> [Accessed 24 April 2018].
Emphasis added.

² Thomas Aquinas, 'Summa Contra Gentiles, Book I, Chapter 7',
<<http://dhspriority.org/thomas/ContraGentiles1.htm#7>> [Accessed 24 April 2018].

³ Georg Gasser, 'Introduction', in *Personal Identity And Resurrection: How Do We Survive Our Death*, ed. by Georg Gasser (Farnham, Surrey: Ashgate, 2010), p. 13.

The argument of this paper is that there is at least one such coherent conception of human personhood and mind-brain relationship that is both faithful to the Christian doctrine of general resurrection and compatible with current science and which can therefore be held by philosophically- and scientifically-informed Christians.⁴ I discuss what I see as the conceptual implications of the doctrine of general resurrection, particularly with regard to the notions of personhood, death and personal identity against the background of doctrine of *creatio ex nihilo*.⁵ I also briefly discuss some scientific and medical issues such as questions posed by general anaesthesia and near-death experiences.

Once some of the theological and scientific considerations are outlined I propose that they exclude at least some conceptions of person and mind-brain relationship, leaving one or more as compatible possibilities. Accepting the fact that the doctrine sometimes excludes and sometimes specifies what is to be believed I propose a conception of human personhood and mind-brain relationship that I see as most compatible with the doctrine of general resurrection and current science, without insisting that it is the only possible one.

⁴ By 'Christian doctrine' I mean the common doctrine shared in particular by the Catholic, Oriental Orthodox and Eastern Orthodox churches as e.g. in the Nicene-Constantinopolitan Creed. Without ignoring the doctrinal differences, whatever they are, I choose to focus on the common source and deposit of faith delivered by the apostles and stressing the imperative of John 17:11. I don't see it as either helpful or necessary to focus on the later differences in this paper.

⁵ E.g. 2 Maccabees 7:28 (NRSV): 'I beg you, my child, to look at the heaven and the earth and see everything that is in them, and recognize that *God did not make them out of things that existed*. And in the same way the human race came into being.' Emphasis added.

Doctrine of General Resurrection

General resurrection is at the core of Christian *kerygma* from the very beginnings of the church.⁶ As Paul's concise summary puts it,

For if the dead are not raised, then Christ has not been raised. If Christ has not been raised, your faith is futile and you are still in your sins. Then those also who have died in Christ have perished. If for this life only we have hoped in Christ, we are of all people most to be pitied. (1 Corinthians 15:16-19)

In other words the death and resurrection of Jesus are in a reciprocal relation with our death and resurrection; denial of one denies the other.⁷ Gasser suggests that '*the creeds make clear that the doctrine of bodily resurrection is not an addendum to Christian faith but belongs at its very core.*'⁸ The doctrine of general resurrection is therefore central, normative and indispensable.⁹ It is however open to questions asked ever since: '*How are the dead raised? With what kind of body do they come?*' (1 Corinthians 15:35)

No answer to this question can avoid discussion of Pauline terms such as the body (*soma*), the flesh (*sarx*) and the spirit (*pneuma*).¹⁰ Pauline theology and anthropology are interwoven as demonstrated by his use of 'body' and 'flesh'.¹¹ The concept of *soma* in particular can be seen as keystone of Paul's theology.¹² Contrasting our present bodies which are *physical, perishable, sown in dishonour and weakness, the immortal resurrection bodies* of which Paul talks are to be *imperishable spiritual bodies, raised in glory and power*.¹³ Paul thus insists on both *personal identity* and *radical change* between our present bodies and our resurrected bodies; the importance of this key point in this paper cannot be over-emphasised.¹⁴ Taking this insistence seriously is critical in any discussion of general resurrection that is to be faithful to the Christian tradition as witnessed in the Pauline corpus and which can be traced back to Daniel 12:1-3.¹⁵ '*While Paul promises no resurrection of the flesh, he proclaims it for the body; whereas man as sarx cannot inherit the kingdom of God (1 Cor. 15:50), man as soma can.*'¹⁶

⁶ E.g. 1 Thessalonians 4:14-17, 1 Corinthians 15:1-58.

⁷ Markus Mühling, *T&T Clark Handbook of Christian Eschatology* (London: Bloomsbury T&T Clark, 2015), p. 280.

⁸ Gasser, p. 3.

⁹ John Barclay, '1 Corinthians', in *The Oxford Bible Commentary*, ed. by John Barton and John Muddiman (Oxford: Oxford University Press, 2001), pp. 1108-1133 (p. 1130).

¹⁰ 1 Corinthians 15:44

¹¹ James Dunn, *The Theology of Paul the Apostle* (Edinburgh: T&T Clack, 1998), p. 52.

¹² John Robinson, *The Body: A Study in Pauline Theology* (London: SCM Press, 1952), p. 1.

¹³ 1 Corinthians 15:42-44

¹⁴ Barclay, p. 1132.

¹⁵ Daniel 12:1-3, dated to ca. 167-164 BCE, is believed by most scholars to be the earliest definitive biblical evidence for the resurrection of the dead: C. D. Elledge, 'Resurrection of the Dead: Exploring Our Earliest Evidence Today', in *Resurrection: The Origin and Future of a Biblical Doctrine*, ed. by James Charlesworth and others (T&T Clark: London, 2006), pp. 22-52 (p. 25).

¹⁶ Robinson, p. 31.

Persons, relations, and Pauline *somata*

Any proposal regarding general resurrection must therefore take into account both personal identity and radical change, and I suggest that one of the keys to such proposal is the relational nature of Paul's theology which is at odds with a physicalist preconception of human being: 'persons are social beings, defined as persons by their relations' first and foremost.¹⁷ These relations are the relations to God and other human beings, as well as the cosmos, and are *constitutive* of who we are in Christian anthropological thought. Paul's dual background in Hebrew and Greek thought and lexicons is particularly relevant here because whereas 'Greek thought tended to regard the human being as made of distinct parts, Hebrew thought saw the human being more as a whole person existing on different dimensions'.¹⁸ We should not therefore uncritically and anachronistically assume that what Paul calls *soma* in a Hellenised Hebrew context after encounter with Christ is precisely what we would call *body* today.

Paul talks of bodies with regard to both kinds of *soma*, yet his distinction between bodies in the present age and in the new creation is seen by some as leaving open the notion of *disembodied resurrection*.¹⁹ I argue that disembodied resurrection is not a well-justified understanding of the Christian doctrine and is not philosophically or theologically coherent not least because 'Paul envisages an incompleteness in the process of salvation which can only be resolved by the new body of resurrection.'²⁰ There are also philosophical problems here as Schärfl points out:

the notion of "disembodied self" is (phenomenologically speaking) self-contradictory. Because to be a self includes being in relation to others (at least open to the relation with others). And this, as Paul Ricoeur pointed out, is the place of the body: to be precise, of the experienced body and of embodiment.²¹

That may be why Paul never uses *soma* in relation to a *dead body*: an important point for this paper which further highlights the distinction above.²² Today expressions such as 'his corpse' and 'his dead body' are conceptually identical; Paul's usage of *soma* suggests a difference. Robinson calls attention to the fact that 'the Old Testament background consists paradoxically in the important fact that the Hebrews had no term for the "body" which is in any sense technical or doctrinally significant. In the Septuagint the Greek word *soma* translates no less than eleven Hebrew words.'²³

¹⁷ Dunn, p. 53.

¹⁸ Dunn, p. 54.

¹⁹ P.W. Gooch, 'On Disembodied Resurrected Persons: A Study in the Logic of Christian Eschatology', *Religious Studies*, 17.2 (1981), 199-213.

²⁰ Dunn, p. 490, and Oscar Cullman, *Immortality of the Soul or Resurrection of the Dead? The Witness of the New Testament* (London: Epworth, 1958).

²¹ Thomas Schärfl, 'Bodily Resurrection: When Metaphysics needs Phenomenology', in *Personal Identity and Resurrection: How Do We Survive Our Death?*, ed. by Georg Gasser (Farnham, Surrey: Ashgate, 2010), pp. 103-126 (p. 122).

²² Dunn, p. 56.

²³ Robinson, p. 11.

How to think coherently about this has been a question for Pauline scholars for a long time. As Dunn suggests, *embodiment* in contemporary English may be a better, more faithful context-sensitive translation of Paul's *soma* in first-century Greek, which also goes some way to explain why Paul wouldn't use *soma* for a corpse – *a corpse doesn't embody anyone*.²⁴ Paul argues strongly against Corinthians' rejection of bodily resurrection while at the same time affirming that flesh and blood cannot inherit the Kingdom.²⁵ If *soma* is nothing but flesh and blood Paul is hopelessly confused; but if *soma* is conceptually closer to or means embodiment it is a very different story.²⁶ As Dunn suggests 'the soulish body, the present body as such, cannot share in the Kingdom of God; it is also corruptible flesh and blood, and only the incorruptible, the spiritual body, is capable of inheriting God's kingdom.'²⁷ This is consistent with the insistence on embodied or bodily resurrection while rejecting the re-assembly model of resurrection:

It is therefore phenomenologically sound to say that the embodied person is not identical with the physical body and that embodied persons on the one hand and physical bodies on the other are different entities and represent different kinds of entities; although the embodied self has to be "realized" in order to exist, it is not necessary (in the broadest sense of necessity) that it has to be *biologically realized*.²⁸

I'd add to Schärntl's conclusion that even the concept of biological realisation may be open to alternatives: while all life as we know it is carbon- and water-based we do not know whether these two attributes are strictly speaking necessary for life or other forms of life may exist elsewhere in the universe that do not depend on water or are not carbon-based.²⁹

Transformative re-embodiment by the grace of God

I propose that the alleged personal identity gap problem seen by some as problematic for the doctrine of resurrection does not arise if a theologically justified and philosophically coherent personalist-phenomenological conception of human person like that described below is adopted. Out of the three models of resurrection: the materialistic-atomistic, the dualistic and the personalist-phenomenological, I suggest it is the last one that can most easily bear the weight of orthodox doctrine and contemporary science. For Paul, our redemption and life everlasting isn't a matter of *escaping embodiment* (against Gnostics or 'the Greeks'), but of *personally-continuous transformative re-embodiment by the grace of God*, embodiment being characteristic of human beings that participate in

²⁴ Dunn, p. 56.

²⁵ Mühling, p. 281.

²⁶ Barclay, p. 1131.

²⁷ Dunn, p. 60.

²⁸ Schärntl, p. 123.

²⁹ *Water and Life: The Unique Properties of H₂O*, ed. by Ruth Lynden-Bell and others (Boca Raton, FL: CRC Press, 2010).

creation which is itself embodied: ‘soma gives Paul’s theology an unavoidably social and ecological dimension.’³⁰

How does then *soma* relate to *sarx*? This is a controversial question as Dunn and others accept.³¹ For the purposes of this paper I adopt Dunn’s position that Paul’s use of *sarx* ranges from a neutral term for what today we would call the biological body to a theologically negative, defective, disqualifying or destructive concept – the antithesis to *pneuma* – and thus the intended meaning of *sarx* depends on the context.³² Dunn however suggests that the common thread running through this ‘*sarx* spectrum’ is human mortality, the medical and scientific aspects of which I discuss below.³³ To summarise Dunn, Paul made a distinction between *soma* and *sarx*, and the spectrum of meaning for *soma* tends to be more neutral, while the spectrum of *sarx* tends to be more negative – thus “‘Body,” the more neutral term, can be transformed and raised again. “Flesh” cannot.’³⁴ In other words, our present body or embodiment is ‘fleshy’, but that is a contingent and not a necessary truth.

As we are only too familiar with the attributes of our present bodies, I focus on the Pauline attributes of our resurrection bodies, in particular regarding the personal identity of the resurrected. What needs to be said first and foremost is that it is *us* who shall be resurrected if the Christian doctrine of resurrection is to be relevant to *us*. This ‘usness’, in its first- and second-person perspectives, is indispensable to the whole notion of interpersonal life and resurrection as transformative re-embodiment. Considering the embodiment of persons discussed above, Dunn suggests that for Paul “‘body” denotes a *being in the world*, whereas “‘flesh” denotes a *belonging to the world*; for Paul, human beings will always be embodied beings, by definition’ but not necessarily *fleshy* beings.³⁵ Now, *soma* and *sarx* coincide: in the creation to come *flesh* gives way to *spiritual embodiment*.

Creation, persons and relations

If humans are created persons-in-relation this means that they should be distinguishable as themselves *ad intra* (from the first-person perspective), *ad extra* (from the third-person perspective) and *ad deum* (in relationship to their Creator): ‘it is because they are related to God that they are self-related.’³⁶ The *ad deum* relation here is *constitutive*, as Poulsom explains:

Being created, Thomas thinks, means that there is nothing in the creature other than a relationship to the creator; and since the divine creative act is nothing other than God with a relationship to the created, the God-creature relationship is not a

³⁰ Dunn, p. 61.

³¹ Dunn, p. 62.

³² Dunn, p. 65.

³³ Dunn, p. 66.

³⁴ Dunn, p. 71.

³⁵ Dunn, p. 72.

³⁶ Mühling, p. 184.

real relationship in God, whereas the creature-God relationship is a real relationship in the creature.³⁷

I have more to say on the constitutive perspective later when I discuss Lynne Rudder Baker's Constitution View of persons and its relationship with the proposed personalist-phenomenological model, but it is important to say that the crux of the proposal in this paper does not hang on the Constitution View.

I propose that the doctrine of general resurrection requires personal identity understood inter-personally; *it does not require atomistic identity, which is inextricably linked to a particular mode of personal implementation*: 'The story of the physical body ends with death while the story of the embodied person continues if there is a possibility of realization in the afterlife. And from the perspective of theology and metaphysics there is no basis to exclude the possibility of such a realization.'³⁸ It is important to add that neither is there basis to exclude it from a properly scientific perspective, *pace* scientism. If 'total perishing of the flesh is all that the life devoted to feeding its desires can look forward to', then such fleshly existence of 'Adamic humanity' must come to an 'end of a process of decay, the final destruction of the corruptible.'³⁹ In contrast the *spiritual bodies* continue the story of the embodied persons in relation to God and to each other.

This Trinitarian identification of resurrected persons (*ad intra, ad extra, ad deum*) constitutes the sufficient and necessary criterion for personal identity of the resurrected embodied person: the resurrected *embodied persons are personally identical* if and only if the *ad intra, ad extra* and *ad deum* personal relations are in continuity between this creation and the world to come. Thus the now classic imagined difficulties around doppelgangers and teleported bodies discussed in philosophical literature on the issue of personal identity do not arise; they are only problems when one brackets out the Creator and disregards the *ad deum* relation: 'the topic here is personal identity between death and resurrection, and it seems curious, to put it mildly, that one would assume it feasible to discuss resurrection without engaging its proper theological context.'⁴⁰ They do not arise because the Creator *ex nihilo* is the necessary and sufficient condition not only of *being* but also of the *identity of beings*.

Relationality in *creatio ex nihilo*

Since all human persons necessarily possess all three relations together and because of the doctrine of *creatio ex nihilo* no other criteria for trans-creation identity of resurrected persons are either necessary or possible: 'there is no need for [...] dichotomy between substance and relation, once the notion of substance as center of activity and receptivity

³⁷ Martin Poulson, *Dialectics of Creation: Creation and Creator in Edward Schillebeeckx and David Burrell* (London: Bloomsbury, 2014), p. 180, quoting Fergus Kerr, *After Aquinas: Versions of Thomism* (Oxford: Blackwell, 2002), p. 43.

³⁸ Schärfl, p. 124.

³⁹ Dunn, p. 125.

⁴⁰ Robert John Russell, 'Scientific Insights into the Problem of Personal Identity in the Context of a Christian Theology of Resurrection and Eschatology', in *Personal Identity and Resurrection: How Do We Survive Our Death?*, ed. by Georg Gasser (Farnham, Surrey: Ashgate, 2010), pp. 241-258 (p. 243).

has been retrieved. To be is to be substance-in-relation' and to be in relation to God is to be a substance.⁴¹

On the one hand, Lowery highlights, 'the desire for autonomy is so powerful that any sense of being "created" strikes fear into the postmodern heart', on the other, 'there can be no genuine community unless there are genuine selves to make it up', and therefore it is the *created embodied relational selves* that constitute a genuine community and it is created embodied relational selves that are to be resurrected.⁴² The suspended as it were *existence ex nihilo* of human beings, between the not-being and the fullness of being that is the Trinity does not have to be a dichotomy between the Western insistence on substantiality and the Eastern insistence on relationality since *there are no substances not in relation* and *there are no relations without relata*. Hence Clarke's insistence that 'For the very meaning of relation implies that it is between two terms that it is connecting, between two relateds. A relation cannot relate *nothing*.' is not in conflict with Zizioulas, who writes 'A person cannot be imagined in himself but only within his relationships.'⁴³

The two perspectives point towards the reality of human beings as relational selves created *ex nihilo* but who are not *nihil* as long as they are maintained in relation to their Creator by Him who is the fullness of being. The promise of resurrection and life everlasting is a promise to sustain that substantial relation which maintains embodied relational creatures *ex nihilo* in existence *and defines their identity*.

Moreover, there is no temporal gap in the existence of *persons* (unlike their *particular modes of implementation, e.g. their biological bodies*) since all persons at all times are related *ad deum* atemporally: at no point do persons lose their relations to God, who is the necessary condition of the constitution and source of their being and relationality, identity and survival; losing one's ontological relation to God completely means inexistence, thus losing one's being completely, since 'in him we live and move and have our being.' (Acts 17:28).

The *ad deum* personal relation of created, contingent beings is therefore the ontological anchor that links all persons with the eternally present aseity of the godhead. Change in temporal relations *between* human persons does not affect their atemporal *ad deum* relation to God.

Spiritual bodies

How are we then to conceive of spiritual bodies, imperishable and immortal? One question that has received attention is what age will our resurrected bodies have; Augustine and Peter of Lombard have suggested an age of 32 years, based on the age of the resurrected Christ.⁴⁴

⁴¹ W.N. Clarke, 'Person, Being, And St. Thomas', *Communio*, 19 (1992), 600-618, p. 609.

⁴² Mark Lowery, 'The Trinitarian Nature of the Transmodern Person', in *The Self: Beyond The Postmodern Crisis*, ed. by Paul Vitz and Susan Felch (Wilmington, DE: ISI Books, 2006), pp. 269-286 (p. 270).

⁴³ W.N. Clarke, *Person and Being* (Milwaukee, NJ: Marquette University Press, 1993), p. 17 and John Zizioulas, *Being As A Communion* (Crestwood, NY: St Vladimir's Seminary Press, 1985), p. 107.

⁴⁴ Mühling, p. 290.

I propose however that attributing age to *spiritual, imperishable and immortal bodies* is incoherent and conceptually confusing, age being a contingent product of spacetime and biological functions which, as I argue later, there are reasons to believe are unnecessary, incoherent or inapplicable in the new creation.⁴⁵

It is therefore more appropriate to think, as Mühling suggests, that if our physical bodies are determined by physical laws our spiritual bodies are determined by the action of the Holy Spirit described theologically rather than physically, i.e. in the nature, quality and intensity of interpersonal relationships and not physical attributes of carbon-based bodies.⁴⁶ Beyond this necessarily general and vague theological proposal there is perhaps very little that can or should be said as Benedict XVI has suggested.⁴⁷

Resurrection and resuscitation

I now discuss some key differences between the concepts of *resurrection* and *resuscitation*. I propose that there are theological and medical differences between resurrection and resuscitation, despite the fact that both are ultimately dependent on God's creative and sustaining activity, not least because resuscitation is a frequently occurring, medically induced event, unlike resurrection.

Unlike resurrection, which is properly understood theologically as *de gratia* divine act *par excellence*, and which has particular theological significance, resuscitation is a *de natura* event when the processes leading to eventual death are arrested and reversed using medical means at our disposal and which is not expected to lead to religious conversion, salvific belief or eternal life.⁴⁸ Resuscitation is a routine procedure practised by paramedics and others provided the state of the organism being resuscitated has not passed a certain threshold, after which it is not possible to reverse processes leading to death using current medical capabilities. This threshold varies and is subject to change due to advances in medicine, however its existence is not debated: there comes a time when resuscitation is impossible.

When Christians talk of resurrection they do not mean resuscitation as practiced by medics. Resurrection properly understood is not resuscitation but an act of God in a special sense, in a sense which for example falling of rain isn't despite both being totally ontologically dependent on God:

⁴⁵ Jerome Murphy-O'Connor, '1 and 2 Corinthians', in *The Cambridge Companion to St Paul*, ed. by James Dunn (Cambridge: Cambridge University Press, 2003), pp. 74-90 (p. 83).

⁴⁶ Mühling, p. 281.

⁴⁷ Christian Tapp, 'Joseph Ratzinger on Resurrection Identity', in *Personal Identity and Resurrection: How Do We Survive Our Death?*, ed. by Georg Gasser (Farnham, Surrey: Ashgate, 2010), pp. 207-224 (p. 223).

⁴⁸ Therefore raising of Lazarus is resurrection assuming he was truly dead according to a medical definition of death and beyond available resuscitation techniques but different from both resurrection of Jesus and the general resurrection: 'the resurrection of Lazarus is "miraculous" because (at least in a Humean sense) it violates the ordinary processes of nature, whereas the resurrection of Jesus involves the radical transformation of these very processes (at least in a Humean sense) as God begins to make our world into what will one day be completed as the eschatological New Creation.' Russell, p. 242.

Nature exists in autonomy and yet is completely dependent on the gracious presence of the living God for its existence and flourishing – a flourishing that can be understood, depending on the aspect under consideration, as natural, gracious or glorious.⁴⁹

Yet there is a further distinction which needs to be made between resurrection in this creation and the general resurrection in the world to come, and that distinction involves the wider cosmos and what we call the laws of nature.

General resurrection in the new creation

General resurrection has to be both like (in some aspects) and different (in other aspects) from resurrection in this creation, not least to fit the logic of 1 Corinthians. Both are particular acts of God, and to paraphrase Irenaeus, our resurrection in both cases comes from His grace and not our nature – an important distinction sometimes unjustifiably ignored. Both are similar in that they are not cases of resuscitation. Yet they are also significantly different, particularly in their causal and physical context: critically, *resurrection in the world to come, unlike the resurrection in this world, does not have to take place in the context of laws of nature that obtain in this spacetime*. Regardless of whether laws of nature are prescriptive or descriptive they are laws of a given spacetime, with its cosmological constants, etc. and there is no logical or scientific demonstration of their necessity *per se* in every possible spacetime.⁵⁰

Considering the above in light of the scientific and medical aspects discussed below, it is clear that we need to distinguish between the life of *organisms* as a particular biological *mode of personal implementation*, dependent on carbon, oxygen, etc., and life everlasting as the destiny of *persons* in the presence of eternal God.

Anyone familiar with biology would accept that death on this planet is part of *biological* life: it may be postponed, perhaps substantially, but it cannot be eliminated due to a number of reasons from programmed cell death to the expansion of the Sun towards its end of life, to the thermal death of the universe.⁵¹ ‘The future of the universe *would have been* what science predicts (that is, “freeze or fry”), had God *not acted* at Easter and *not continued to act* in the future.’⁵²

Biological life as we know it has to end sooner or later; the life we are promised *qua* persons in the new creation in presence of the Lord does not. Therefore it is a matter of conceptual coherence that whatever the spiritual bodies are, they need to be fit for life everlasting and for experiencing the Beatific Vision or *theosis* as embodied persons-in-relation – which means they cannot be mere reproductions of our mortal biological bodies and that life everlasting is not biological life as we know it.

⁴⁹ Poulson, p. 184.

⁵⁰ Friedel Weinert, ‘Laws of Nature – Laws of Science’, in *Laws of Nature: Essays on the Philosophical, Scientific and Historical Dimensions*, ed. by Friedel Weinert (Berlin: Walter de Gruyter, 1995), pp. 3-65.

⁵¹ Russell, p. 245.

⁵² Russell, p. 253. Original emphasis.

Human Personhood

I continue the discussion of human personhood and how are we to understand the personal identity of the resurrected in light of the doctrine of general resurrection in this section. I propose that the re-assembly model of resurrection is fundamentally flawed and that it cannot be the basis for general resurrection. Instead, I propose a personalist-phenomenological conception of human personhood that is more compatible with findings of science and the doctrine of general resurrection. Due to space constraints I am unable to discuss many important questions around the concept of person, but as per Zagzebski, Rudman and Rheinfelder I adopt the position that ‘the category of persons cuts across classifications of natures.’⁵³

The failure of the re-assembly model

One of the oldest and most widely discussed models of bodily general resurrection is the so-called re-assembly model which has both patristic and modern defenders. In simplified terms it proposes that at eschaton the constituent parts (‘simples’) of the human bodies of those who have died shall be gathered and put together by God and re-infused with souls, thus actualising the promise of resurrection of the body. I propose that this model is fundamentally deficient and should be rejected on theological, philosophical and scientific grounds particularly because ‘The preservation of the corpse and of the simples which are present in it does not guarantee resurrection; and the total annihilation of the corpse does not hinder or rule out resurrection.’⁵⁴

The doctrine of general resurrection requires resurrection of *all* human persons who have ever lived, yet situations such as cremation, a nuclear catastrophe or other physical processes involving transformation of matter into energy mean that for some human beings the Almighty will not have ‘simples’ to re-assemble in cases where matter is transformed into energy (e.g. electromagnetic radiation) and loses its material identity. In such cases we cannot speak of even God finding the ‘simples’ of bodies since there are no ‘simples’. It is enough for there to be just one such case for the whole model to collapse.

Proposals that in such cases the Creator may create new matter *ad hoc* to replace parts of bodies transformed into energy e.g. in a thermonuclear reaction are unworthy of the glory of God.⁵⁵ A Creator who creates everything out of nothing by fiat is not a demiurge obliged to scour for bits and pieces of dead bodies that have long been transformed into energy or different chemical elements; He cannot be thwarted by the will of a tyrant unleashing nuclear Armageddon and transforming human bodies into radiation. It is inconsistent and theologically naïve to suggest that having created everything and everyone *ex nihilo* the Creator has to ‘reuse and recycle’.

Additionally, for persons who have died in old age or because of deforming illness re-assembling their often decrepit bodies *as they were at the time of death* cannot be

⁵³ Linda Zagzebski, ‘The Uniqueness of Persons’, *The Journal of Religious Ethics*, 29.3 (2001), 401-423 (p. 404).

⁵⁴ Schärtl, p. 125.

⁵⁵ Silas Langley, *Death, Resurrection, and Transporter Beams: An Introduction to Five Christian Views on Life after Death* (Eugene, OR: Wipf & Stock, 2014), p. 83.

compatible with the joy of life everlasting promised to those who love Him. Similarly, persons with congenital medical conditions by definition do not have a previous state free of such conditions to be restored to at the general resurrection; thus requiring a different body while maintaining personal identity. The *spiritual bodies* of the life everlasting would have to be *experiential bodies fit for the presence of God* and do not have to be biological bodies that have evolved, aged and are subject to contingent biological processes (such as sweating and digestion dependent on microflora) that are unnecessary and irrelevant outside the specific biological habitat of planet Earth at a given time. Aquinas for example accepts that the parts of the human body come and go during earthly life, which is inconsistent with the re-assembly model.⁵⁶ He also points out that the identity required cannot be constituted by the constituents: ‘what gives identity is the “species”, which is a structuring factor.’⁵⁷

Last but not least the re-assembly model is out of date and incompatible with demonstrated findings of modern physics since it depends on a simplistic pre-quantum notion of parts (‘simples’) that are scattered after death but can be put together by the Almighty. The notion of atoms as hard indivisible objects that are stable, can be re-identified and put together as constituent parts of *inter alia* human bodies, is now known *not* to be a correct description of the physical world at its most fundamental level, and belongs to a bygone era of exclusively Newtonian physics. Atoms are divisible; matter has both particle and wave properties; observed matter is affected by the act of observation; energy and matter are interchangeable, matter can and does get transformed into energy and so on.⁵⁸

The historical objections to the re-assembly model often focus on cases of animals or cannibals eating human bodies and the resulting difficulties in identifying which ‘simple’ is part of which body and who has better claim to particular bits. Modern physics goes much further – the problem is not that ‘simples’ are difficult to re-identify – but that since energy and matter are interchangeable and since many chemical and physical processes transform chemical elements into different chemical elements, *there are no ‘simples’ to re-identify* and put together; there is no coherent notion of identity of a particular bit of matter with a particular burst of energy. As Polkinghorne, a physicist and theologian, explains,

It is not necessary, however, that the “matter” of these bodies should be the same matter as makes up the flesh of this present world. *In fact, it is essential that it should not be.* That is because the material bodies of this world are intrinsically subject to mortality and decay. If the resurrected life is to be a true fulfilment, and not just a repeat of an ultimate futile history, the bodies of that world-to-come must be different, for they will be everlastingly redeemed from mortality.⁵⁹

⁵⁶ Thomas Aquinas, ‘Summa contra Gentiles’, Book 4, Chapter 81, <<https://dhsprory.org/thomas/english/ContraGentiles4.htm#81>> [Accessed 24 April 2018].

⁵⁷ Schärtl, p. 119.

⁵⁸ Robert Mann, *An Introduction to Particle Physics and the Standard Model* (Boca Raton, FL: CRC Press, 2010).

⁵⁹ John Polkinghorne, *Science and Theology: An Introduction* (London: SPCK, 1998), pp. 115-16. Emphasis added.

The combined cumulative effect of the above objections to the re-assembly model suggests that it has to be rejected and replaced by a more informed and coherent model, such as the personalist-phenomenological one proposed in this paper. ‘Eschatic bodiliness of the resurrection is not to be understood simply as reduplication of the world at present’ is another way of articulating the same position.⁶⁰ From the perspective of the *ad intra* relation discussed above, ‘phenomenology can help us see that the corpse is no serious competitor in candidacy [for the closest continuer]’⁶¹ This is also in accord with Pauline position of not using *soma* to refer to corpses. That is the case not just because the corpse has no first-person perspective but because

the concept of bodily resurrection is the notion of an embodied human person not that of a physical body as accounted for in scientific theory. In other words it is fully compatible with the doctrine of general resurrection to claim that bodily resurrection requires embodiment but not particular biological realisation of one’s biological body as we are familiar with it from this world.⁶²

It is embodied persons that are resurrected, not particular biological implementations of them at a particular stage of their lifecycle, and therefore it is relational personhood and not biology that is central to any discussion of general resurrection.

Relational personhood

Personhood is necessarily characterised by relationality and first-person perspective, even if the ‘analytic tradition of philosophy [...] had little if anything to say about relationality as an essential feature of human personhood.’⁶³ Richard of St Victor defines a person as an ‘incommunicable existence’ or ‘incommunicable from-another-and-to-another becoming’.⁶⁴ Zagzebski proposes that ‘to be a person is to be an incommunicable subject’.⁶⁵ Mühling talks of *human becoming* instead of *human being* ‘since the relationships at stake are not static but dynamic and narrative’: thus the person is an ‘incommunicable-from-another-and-to-another-becoming’ that stands in relation.⁶⁶ But what relation? ‘If we remember that God brought about creation in correspondence to his own being as love, then it is evident that these relations are nothing other than love.’⁶⁷

⁶⁰ Mühling, p. 300.

⁶¹ Schärtl, p. 123.

⁶² Gasser, p. 12-13.

⁶³ Kevin Corcoran, ‘Constitution, Resurrection, and Relationality’, in *Personal Identity and Resurrection: How Do We Survive Our Death?*, ed. by Georg Gasser (Farnham, Surrey: Ashgate, 2010), pp. 191-206 (p. 191).

⁶⁴ Richard of St Victor and Ruben Angelici, *Richard of Saint Victor on the Trinity: English Translation and Commentary* (Eugene, OR: Cascade Books, 2018), p. 157.

⁶⁵ Zagzebski, p. 420.

⁶⁶ Mühling, p. 206.

⁶⁷ Mühling, p. 207.

We should therefore think of our biological, flesh and blood bodies as a mode of implementation of ‘our personal and communicative being-in-relation’.⁶⁸ And therefore, as Mühling suggests, ‘the concept of bodily resurrection means that God revives the relational structure of the dead person to the extent that this does not contradict the person’s identity’.⁶⁹ I’d revise Mühling’s definition to add that not only it doesn’t contradict the person’s identity but *it constitutes and guarantees the person’s identity*, as discussed earlier.

I suggest that a type of personalism seems conceptually necessary to give a satisfactory theological and philosophical account of persons and inter-personal relations particularly with regard to the doctrine of resurrection, since ‘Human persons are always – from the beginning of the Christian narrative to its very end – persons-in-relation.’⁷⁰ Social psychologists suggest that the capacity to have first-person perspective is ‘*socially emergent*, requiring social interaction, a linguistic community, and human intersubjectivity for its emergence.’⁷¹ This view rejects reductive physicalism, where human beings are fully reducible to their physical parts without ontological remainder since *a priori* there is no space for personhood in its ontology.⁷² To reject reductive physicalism however is not to reject the findings and insights of science; it is rejection of *scientism*, an unwarranted expansion of the domain of empirical sciences beyond the empirical.⁷³

⁶⁸ Mühling, p. 298.

⁶⁹ Mühling, p. 298.

⁷⁰ Corcoran, p. 192.

⁷¹ Corcoran, p. 199. Original emphasis.

⁷² Leaving aside the questions of what is *physical*, and whether by physical we take it to mean what the current physics posits *or* what some future physics may posit: questions outside the scope of this paper.

⁷³ *Scientism: The New Orthodoxy*, ed. by Richard Williams and Daniel Robinson (London: Bloomsbury, 2015).

Minds-Brains or Persons-Bodies?

Many competing theories of mind exist but none commands anything near scholarly consensus; all have weighty objections to them and indeed arguments have been proposed to suggest that we may never be able to explain our minds.⁷⁴ If the explanation of the mind must ultimately include explanation of the explainer, the explanation and the explained, there may be an insurmountable obstacle to a complete theory of mind, despite protestations by scientists and philosophers:

There is simply no causal narrative - and probably never can be one - capable of uniting the phenomenologically discontinuous regions of “third-person” electrochemical brain events and “first-person” experiences, nor any imaginable science logically capable of crossing that absolute qualitative chasm.⁷⁵

Reductive physicalists, epiphenomenalists and ‘illusionists’ like Dennett are not deterred however. *Persons are things*, proposes the reductive physicalist, simply because *there are only things* and *no-thing* else; the only ontological category, when all is said and done, is the category of the *physical*, and therefore every-thing is and indeed must be reduced to the physical, to be exhaustively explained by some future *ideal physics* (even if we don’t know what it could or could not include).⁷⁶

Reductive physicalism allows no conceptual room for a Christian conception of God nor is there anything to resurrect following the inevitable breakdown of ‘things’ called human beings, so the narrative goes. Reductive physicalism, being as it is associated with expansive naturalistic atheism, is therefore not a candidate for a compatible conception. What proposals could be candidates? I suggest that Lynne Rudder Baker’s Constitution View (CV) could be considered as *a part* of a viable proposal if we are ready to step back from brains and minds and turn towards persons and embodiment as I advocate above in light of phenomenology, *creatio ex nihilo*, and Pauline theology.⁷⁷

Constitution View (CV)

Rudder Baker suggests that ‘persons are not identical to their bodies nor parts of their bodies (for example, brains) nor to their bodies plus something else (for example, immaterial souls)’ and proposes that persons are *constituted* by their bodies but - crucially - without being identical to them.⁷⁸ She thus rejects both reductive physicalism as well

⁷⁴ Colin McGinn, *The Mysterious Flame: Conscious Minds in a Material World* (New York, NY: Basic Books, 2000).

⁷⁵ David Bentley Hart, ‘The Illusionist: Daniel Dennett’s latest book marks five decades of majestic failure to explain consciousness’, in *The New Atlantis*, <<http://www.thenewatlantis.com/publications/the-illusionist>> [Accessed 24 April 2018].

⁷⁶ Tim Crane and D.H. Mellor, ‘There is no Question of Physicalism’, *Mind*, 99 (1990), 185–206.

⁷⁷ Lynne Rudder Baker, ‘Persons and the Metaphysics of Resurrection’, in *Personal Identity and Resurrection: How Do We Survive Our Death?*, ed. by Georg Gasser (Farnham, Surrey: Ashgate, 2010), pp. 161-176.

⁷⁸ Rudder Baker, p. 162.

as Cartesian dualism, while offering a conception which is compatible with the above-proposed personalist-phenomenological view and with the above reading of Paul's insistence on personally-continuous but radically transformed embodiment.⁷⁹ As discussed earlier, and as Rudder Baker underlines, 'a person has a first-person perspective essentially', and it is therefore necessary to attribute thinking to a person and not her brain.⁸⁰ This is of course in radical disagreement with the reductive physicalist since the ontological category of the person with first-person perspective is taken seriously: 'understanding "person" to refer to entities like you and me, it is obvious that persons exist'.⁸¹ Indeed, against a substantial 'illusionist' philosophical literature we may paraphrase one of twentieth century's greatest philosophers: God grant the philosopher insight into what lies *behind* everyone's eyes.⁸²

I have argued above that the re-assembly model of resurrection is incoherent and should be rejected on theological, philosophical and scientific grounds; CV similarly rejects the identification of the sets of biological 'simples' as being persons: 'So what makes something a person is not the "stuff" it is made of. It does not matter whether something is made of organic material or silicon, or in the case of God, no material "stuff" at all. In short, Person is an ontological kind whose defining characteristic is a first-person perspective.'⁸³ Unsurprisingly, CV depends on the truth of the proposition that *constitution is not identity*; surprisingly, one of the arguments for it is the biological fact that human bodies change radically throughout our lives - the body of a 9 year old and a 90 year old human being are not identical - yet both the first-person and third-person references to the person in question, as well as the legal and medical references, are. This understanding of reference is also supported by the classic reading of Genesis 2:26, where likeness is understood to be first-person perspective, the hallmark of personhood: 'Given how important the first-person perspective is to the Christian story, Christians have good reason to take our having first-person perspectives to be central to the kind of being that we are. Hence, Christians have good reason to endorse the Constitution View.'⁸⁴

In other words, we have philosophical, scientific and theological reasons to believe that the first-person perspective is an ontological given and the world that *we persons* inhabit is irreducibly *personal* – which in no way negates its physicality but neither does it reduce all ontology to the physical.⁸⁵ Therefore we have independent reasons to reject reductive physicalism and 'illusionism':

⁷⁹ Rudder Baker, p. 163.

⁸⁰ Rudder Baker, p. 161.

⁸¹ Rudder Baker, p. 161.

⁸² Ludwig Wittgenstein, *Culture and Value* (Chicago, IL: University of Chicago Press, 1980), p. 63.

⁸³ Rudder Baker, p. 163.

⁸⁴ Rudder Baker, p. 176.

⁸⁵ Lynne Rudder Baker, *Naturalism and the First-Person Perspective* (Oxford: Oxford University Press, 2013).

CV denies that we have the persistence conditions of an organism and denies too that the emergence of a first-person perspective is ontologically insignificant, adding no new kind of thing to the world.⁸⁶

Objections to the Constitution View

Unsurprisingly, there are objections to the CV. Due to space constraints I discuss only two of them raised by Turner Jr. who suggests that ‘CV has no explanatory power’ and that it ‘yields no essential distinction between human and divine persons’ insofar as they relate to this paper.⁸⁷ Both of these philosophical objections may appear substantial if considered exclusively philosophically, yet the proposal in this paper is not so constrained – and when the CV is part of a Christian personalist-phenomenological model of resurrection neither objection affects it. The second objection particularly fails to pay attention to the ontological difference discussed earlier between created and contingent human persons in *imago Dei* and the uncreated aseity of the divine persons of the Trinity, restricting itself to a philosophical analysis of the concept of ‘person’. It may be true that taken in isolation the first-person perspective on its own does not yield an essential distinction between human and divine persons – but nothing forces us to take such a view, and everything in Christian tradition requires us *not* to do so.

Turner’s objections seem to hinge on the misleading distinction between being persons simpliciter essentially and being persons of a particular kind (human or divine) accidentally. Such approach puts ‘divine persons’ into a super-category of ‘persons’ thus making the Trinity a member of a set along with other kinds of persons: which gets the relation exactly wrong, since we are in the *imago Dei* and not *imago Dei* is in the *imago personae simpliciter*, not to mention that the divine Persons are not divine accidentally but substantially, as defined by Nicaea. Turner proposes that ‘there are no primary kind persons’ when he restricts himself to a philosophic analysis of CV disregarding that the original proposal is set within a wider theistic and specifically Christian context. When one is not so restricted it is clear that the Persons of the Trinity are the primary kind persons – indeed the personhood of humans is imperfectly and contingently shared created personhood, maintained solely by relation to the uncreated aseity of the divine Persons.

I thus conclude that Turner’s objections do not undermine the CV in such a way and to such extent that it may not serve as part of my proposal. Indeed his objections underline and point towards the concept of personhood rooted in the Christian doctrine.

⁸⁶ Corcoran, p. 196.

⁸⁷ James T. Turner Jr., ‘No Explanation of Persons, No Explanation of Resurrection: on Lynne Baker’s Constitution View and the Resurrection of Human Persons’, *International Journal for Philosophy of Religion*, 76.3 (2014), 297-317 <<https://doi.org/10.1007/s11153-014-9463-4>>.

Scientific and Medical Considerations

I now discuss some of the relevant medical and scientific considerations that affect the proposal in this section, which serve as its background in the relevant domains.

Evolution and personalist-phenomenological model of resurrection

The theory of evolution and its implications for theistic belief is a major subject of continuing heated debates. For the purposes of this paper we are only interested in its implications for the doctrine of general resurrection with regard to the proposed personalist-phenomenological model of resurrection against the background of *creatio ex nihilo*.

If all biological life is inter-related and if biological life has evolved, it means that our present biological bodies are products of evolution – but it does not mean that they are products of random chance or that the first life form is somehow independent of the Creator or – crucially - that persons cannot be embodied differently.⁸⁸ The proposed conception therefore is not affected by the theory of evolution since evolution addresses a different order of explanation, namely particulars of given biological organisms, and is compatible with the personalist-phenomenological model.

General anaesthesia (GA) and the first-person experience of time and being

GA is a pharmaceutically-induced state without which many medical interventions would be practically impossible. The exact nature of GA is not fully understood; what is known however allows its induction, maintenance, and the restoration of patients to the conscious state in most cases. GA raises many important questions at the intersection of medicine, theology and philosophy; here I discuss only one of them: how can we use our limited understanding of GA from both first- and third-person perspective to inform our theological and philosophical discussion of general resurrection?

I suggest that GA is characterised by absence of certain attributes and by presence of certain other attributes as follows: absence of first-person sense of time, effective agency, perception, and consciousness; and presence of continuing interpersonal relations (a patient in GA remains embedded in the web of interpersonal relations despite lack of perception, consciousness or effective agency), as well as presence of biological processes, albeit in slowed down or reduced state, necessary for maintenance of life and potential subsequent restoration of consciousness once GA-inducing pharmaceutical agents are withdrawn.

It is evident that there are both similarities and differences between death and GA. In both death and GA persons lack effective agency and there is no evidence of consciousness or perception. While we can only describe death from a third-person perspective, GA is not so constrained provided the anaesthetised person regains consciousness. Individuals who have had GA (including the author of this paper) report lack of sense of time or being ‘*during*’ GA: they remember how GA was induced, and how they regained their consciousness – but not the *unexperienced* duration of the

⁸⁸ *Between Chance and Choice: Interdisciplinary Perspectives on Determinism*, ed. by Harald Atmanspacher and Robert Bishop (Thorverton: Imprint Academic, 2002).

temporal gap between entering the GA and returning to conscious state.⁸⁹ If we further reflect on GA, it becomes evident that that is a necessary conclusion: if sense of time requires consciousness, and if GA is absence of consciousness, it follows that sense of time must be absent if the state one is in is of GA.

Death without return to consciousness

Death after recovery from GA does not concern us here; what is of conceptual interest is *death during GA without return to consciousness*. Recalling that after successful induction of GA persons lack effective agency and there is no evidence of them possessing consciousness or perception, and there are first-person reports of lack of sense of time, challenging questions arise regarding the transition from *being in GA* to *being dead*.⁹⁰

If I die while under GA, the third-person point in time of my death would be open to third-party scrutiny by way of medical observations; but what about the first-person perspective? It appears that as far as first-person perspective is concerned *I have died at the time of induction of GA*, and not at some later point in time – since time, perception and consciousness stopped *for me* at the point of induction. It therefore appears phenomenologically that the ‘closest relative’ of death is GA, and that we routinely submit to the risk of dying in GA in the hope of restoration to consciousness. Indeed the transition from conscious to GA state to death can be described as one of a spectrum of order/entropy, moving from higher order/lower entropy towards lower order/higher entropy.

Near-Death Experiences (NDEs)

NDEs are first-person reports of experiences of individuals who were ‘close to death’ but were later resuscitated or their condition has unexpectedly improved.⁹¹ These varied reports present significant epistemological and ontological difficulties and their nature and implications remain open to interpretation and debate. Perhaps the only two aspects of NDEs that are agreed upon is that there are individuals who claim to have had NDEs and that the lives of many such individuals undergo radical change as a consequence.⁹² Interpretations of NDE reports range from purely physicalist (e.g. oxygen deprivation, hallucinations caused by disrupted biochemical processes, shutting down of the brain stem) to ‘spiritualist’ (e.g. ‘proof of heaven’ and ‘meetings with angels’).⁹³

Despite the term, how near to death are NDEs? Given conceptual and epistemic difficulties around death Mühlhling suggests that ‘near-death experiences do not tell us

⁸⁹ *Memory and Awareness in Anaesthesia IV*, ed. by C. Jordan, D.J.A. Vaughan, D.E.F. Newton (London: Imperial College Press, 2000).

⁹⁰ There are of course numerous medical and legal issues here that are however outside the scope of this paper.

⁹¹ Penny Sartori, *What is a Near-Death Experience?* (London: Duncan Baird, 2016).

⁹² Pim van Lommel, *Consciousness Beyond Life: The Science of the Near-Death Experience* (New York, NY: HarperOne, 2010).

⁹³ Mühlhling, p. 178.

anything about death itself'.⁹⁴ This seems to be a correct conclusion if death is an irreversible, by definition, point on the timeline of process of dying. There is no doubt that some patients that had NDEs were in the process of dying, but that process by definition did not reach the point of *actual irreversibility*, and therefore did not constitute death *per se*.

As far as we know consciousness requires sufficient levels of highly ordered electrical activity in the cerebral cortex and the brain stem; in other words consciousness seems to be somehow dependent on the brain. Yet various NDE studies *seem* to suggest that sometimes consciousness is present without such brain activity.⁹⁵ This is a highly controversial area of research which is outside the scope of this paper, but if such studies are correct the consequences may be revolutionary for the contemporary scientific worldview.

Notwithstanding this, however, it appears that NDEs can't tell us anything about death itself, but only about the *process of dying* (and subsequent reversal of that process, which we have discussed as resuscitation). While the experience can be life-changing for the individuals concerned and may provide significant first-person epistemic justification, it seems to offer no help to the present enquiry.

Epistemology and ontology of death

Death itself, as opposed to dying, is not in the 'experiential reality of human subjectivity', despite the fact that death of *others* leaves gaps in interpersonal relations: strictly speaking we do not experience death, only dying.⁹⁶ But when we try to conceptualise *death* we are forced to conceptualise *life* first, and face the numerous challenges presented by different forms of biological life (unicellular, multicellular, etc.).⁹⁷ Thus death appears as parasitic in relation to life. Even if we restrict ourselves to the process of dying in multicellular organisms, and assume that there is a point in time when the dying process starts, and its conclusion is death, we are confronted with the somewhat arbitrary identification of events on a timeline between these two fuzzy points: fuzzy because 'in multicellular organisms there is indeed a theoretical, factual and yet still not identifiable beginning of the process of death'.⁹⁸ Even the judgment on when the process of decay is completed is open to more or less arbitrary placement on the timeline.

Given these and other difficulties it is not surprising that the legal and medical professions seem to have adopted an epistemological rather than an ontological approach to the definition of death: until the 1960s death was generally understood as irreversible cessation of or damage to cardiovascular system.⁹⁹ Since then the focus has shifted more towards brain processes in the cerebellum, cerebrum and the brain stem; however, there is still no statutory definition of death under English law and death can be diagnosed

⁹⁴ Mühling, p. 179.

⁹⁵ Van Lommel, p. 163.

⁹⁶ Mühling, p. 172.

⁹⁷ Carol Cleland and Christopher Chyba, 'Defining "life"', *Origins of Life and Evolution of the Biosphere*, 32, 4 (2002), 387-393.

⁹⁸ Mühling, p. 174.

⁹⁹ Mühling, p. 175.

based either on cessation of cardiovascular or brain stem function.¹⁰⁰ Recent case law suggests that the current practice of the courts accepting cessation of brain stem activity as indicator of death is likely to continue.¹⁰¹ Therefore the medico-legal conception of death is an epistemic one that makes life dependent on brain stem activity and death is conversely defined as absence of such activity. However, such understanding of life is necessarily biological and reductive, being as it is instrumental in the sense of being required for the orderly and predictable operation of medical and legal professions – rather than identification of the truth of the matter.

Whether death is biologically necessary or whether multicellular organisms could, at least in theory, avoid death by changes at cellular level is an open question. Research in this area has tended to focus on programmed cell death.¹⁰² Recently however groundbreaking research on intercellular competition and the inevitability of multicellular aging seems to demonstrate that aging and eventual death is an unavoidable and logically necessary aspect of multicellular organisms.¹⁰³ If that is indeed the case, multicellular life is unavoidably mortal life, and therefore cannot serve as a foundation for resurrection bodies in the new creation – thus supporting a point made earlier in the contexts of theology and physics.

Whatever medical definition of death is adopted, it is evident that death involves an irreversible (in the natural course of events) transition from *highly ordered processes* of a living organism to *increasing disorder*, culminating in termination of processes and dissolution of the biological organism into its underlying constituting elements – in other words *increasing entropy*. While some disorder is present in even highly ordered biological processes, it is nevertheless tolerated and addressed by normally functioning cells (e.g. repair of damaged cells in the normal course of life of the organisms); all these processes however are subject to the Second Law of Thermodynamics, since localised reversal of entropy (ordering) is accompanied by increase in total entropy (disorder).

What interests us here is the threshold of disorder beyond which neither normal cell repair nor medical resuscitation are possible. For the purposes of this paper we only need to posit the mere existence of such a threshold, without having to fix or measure it. Passing this threshold thus excludes resuscitation and fixes death.

¹⁰⁰ Academy of Medical Royal Colleges, *A Code of Practice for the Diagnosis and Confirmation of Death* (London: Academy of Medical Royal Colleges, 2008) <<http://www.aomrc.org.uk/publications/reports-guidance/ukdec-reports-and-guidance/code-practice-diagnosis-confirmation-death/>> [Accessed 25 April 2018].

¹⁰¹ Re: A (A Child) [2015] EWHC 443 (Fam), also see R. Olick, E. Braun, J. Potash, ‘Accommodating Religious and Moral Objections to Neurological Death’, *The Journal of Clinical Ethics*, 20, 2 (2009), 183-91.

¹⁰² Hamsa Puthalakath and Christine Hawkins, *Programmed Cell Death* (New York, NY: Springer Humana Press, 2016).

¹⁰³ Paul Nelson and Joanna Masel, ‘Intercellular Competition and the Inevitability of Multicellular Aging’, *Proceedings of the National Academy of Sciences*, 114, 49 (2017), 12982-12987 <<https://doi.org/10.1073/pnas.1618854114>>.

Objections and responses

This proposal, like others, is open to a number of objections; due to space constraints I discuss just three of them.

Animalism and evolution

The theory of evolution is seen by some as providing, at least in theory, a *complete explanation* of the human being, the *homo sapiens sapiens*, and the theoretical foundation for animalism: the position that we are *nothing but* intelligent animals and that we are animals *essentially*.¹⁰⁴ For the purposes of this paper it isn't the widely accepted fact that we are indeed evolved vertebrate mammals that is the objection but the propositions that we are animals *essentially* and *nothing but* animals and our conditions of persistence are essentially of organic biochemical systems: in other words *homo sapiens sapiens* is completely reducible to the animal body, with all that it entails: in particular the untenable in my view proposition that the 'I' of first-person utterance refers to nothing more than a biped animal, to focus on just one aspect of our animality.

While current medicine and science show the third-person continuity of *homo sapiens sapiens* with other organisms on the Linnaean tree of life what they do *not* show and indeed *cannot show by definition*, given their methods, ontology and taxonomies, is the metaphysical proposition that we are *nothing but* animals, for the simple reason that biology necessarily does not have the categories that would be applicable to non-biological aspects of biological systems, otherwise it would not be biology. The very demarcation of domains of inquiry, that allows research to be biological, *requires* exclusion of concepts and methods not belonging to the category of biological.

Scientific ways of looking at things do tell us truths, to borrow from Schärfl, but particularly in matters of first-person experience and subjectivity 'Scientific ways of looking at things don't tell us more truth about reality than primary experiences which are related to primary properties ... structure of primary properties and events is not the physical body but the experienced body.'¹⁰⁵ The ancients, more familiar with dead bodies and animals than we are, recognised the inescapable similarities between our bodies and the bodies of animals, yet only with the advent of Darwin's theory and subsequent discoveries has the theory of evolution been consecrated by naturalist-atheists as a quasi-religion, as the 'creation myth of our age'.¹⁰⁶ Evolution as religion answers to the *Zeitgeist* of our times but is ultimately an instance of scientism rooted more in the Mephistophelian spirit of denial; 'a magnificent sham' to borrow from Midgley. Why then is it so difficult, as Midgley and others accept, to dispel this creation myth of our age and return to the mundane truths of empirical science? A comprehensive answer is beyond this paper, but perhaps it may lie in the deep-seated human need for creation narrative resonant with the dominant narratives of negative freedom, autonomy and rejection of order that characterise our times.

¹⁰⁴ Stephan Blatti, 'Animalism', in *Stanford Encyclopedia of Philosophy*, <<https://plato.stanford.edu/entries/animalism/>> [Accessed 25 April 2018].

¹⁰⁵ Schärfl, p. 122.

¹⁰⁶ Mary Midgley, *Evolution as a Religion* (London: Routledge, 2003).

Reductive physicalism

Animalism discussed above is but a subset of a wider position known as physicalism, that affects not just the debate about the nature and future of human beings but about the whole of reality. Despite the problems associated with physicalism, such as around the concepts and epistemology of ‘ideal physics’ or exact meaning of ‘supervenience’, it is the dominant paradigm in the contemporary West. Cracks however began to appear in its edifice due to the work of scholars who question its dogmas, such as Bernard d’Espagnat, Edward and Emily Kelly, John Polkinghorne, John Lennox and others.

D’Espagnat, a physicist, philosopher and winner of the 2009 Templeton Prize, shows that the experimentally confirmed findings of quantum physics undermine many buildings blocks of what I call naïve Newtonian scientism which motivate at least some reductive physicalist proposals.¹⁰⁷ In proposing his *Veiled Reality Hypothesis* that rejects conventional realism he argues, *inter alia*, that philosophy must take the experimental findings of quantum physics more seriously, while insisting that certain questions are outside the domain of science, thus rejecting scientism.

Edward and Emily Kelly, psychiatrists and neurobehavioral scientists, argue for irreducibility of the mind in general and a variety of mental phenomena in particular.¹⁰⁸ Proposing that the models developed by Myers and James are not only compatible with contemporary physics and neuroscience but are better explanations of such phenomena they argue that reductive physicalism does not and cannot exhaustively account for the mind and the mental phenomena.

Causal closure

Questions around causal closure give rise to a number of fundamental challenges around resurrection both in this spacetime and in the new creation. Within the constraints of this paper I can only briefly mention some of them.

First, it is necessary to differentiate between the scientific notion of causal closure and a metaphysical claim bearing the same name; acceptance of the first does not require acceptance of the second, so we can ‘affirm the principle of the conservation of energy when it is formulated as a scientific law but not as a metaphysical claim that excludes the possibility of theism and functions as a defining postulate of physicalism.’¹⁰⁹

As Larmer argues, the two forms of the principle of causal closure that are often used interchangeably are in fact *not* interchangeable: one allows for *creatio ex nihilo* while the other one does not, and that distinction is critical for this proposal: whatever *scientific* evidence there is for causal closure concerns only the *scientific notion* which is compatible with the doctrines of *creatio ex nihilo* and the proposed model, and not the metaphysical claim incompatible with them.¹¹⁰

¹⁰⁷ Bernard D’Espagnat, *On Physics and Philosophy* (Princeton, NJ: Princeton University Press, 2006).

¹⁰⁸ Edward F. Kelly and others, *Irreducible Mind: Toward a Psychology for the 21st Century* (Lanham, MD: Rowman & Littlefield, 2007).

¹⁰⁹ Robert Larmer, ‘*Miracles, Physicalism, and the Laws of Nature*’, *Religious Studies*, 44, 2 (2008), 149-159 (p. 150).

¹¹⁰ Larmer, p. 150.

Meixner makes essentially the same point, observing that the impression that physics seems to favour the principle of causal closure over that of sufficient reason is ‘due to an inadvertent addition of *physicalistic metaphysics* to physical science. Note that physics in itself is entirely silent on the question whether there are or are not non-physical non-abstract entities; it is therefore neutral with regard to [both].’¹¹¹ Meixner goes further, and in his discussion of the principles of sufficient reason and causal closure identifies an inherent conflict and proposes that ‘the unified continuance of the physical world – notably in the age of quantum physics – can be taken to *indicate* (not to demonstrate) the existence of God.’¹¹²

Theologically, as Bonhoeffer writes, ‘We are to find God in what we know, not in what we don't know; God wants us to realize his presence, not in unsolved problems, but in those that are solved ... *He must be recognized at the centre of life.*’¹¹³ I propose, based on the crucial distinction between properly scientific and metaphysical notions of closure, that the proposed model is compatible with the doctrines of *creatio ex nihilo* and general resurrection as well as the *scientific* notion of causal closure with reference to Meixner's point about neutrality of physics.

¹¹¹ Meixner, p. 37. Original emphasis.

¹¹² Meixner, p. 45.

¹¹³ Dietrich Bonhoeffer, *Letters and Papers from Prison* (New York, NY: Touchstone, 1971), p. 311. Emphasis added.

Conclusion

I have argued that the central Christian doctrine of general resurrection (with particular reference to the Pauline corpus) can and should be understood in a scientifically and philosophically informed context, and have proposed a personalist-phenomenological model of general resurrection as a *personally continuous transformative re-embodiment by the grace of God* within an interpretative framework that respects the methods and findings of *science* while rejecting *scientism* and associated physicalist metaphysical claims. I have considered and rejected the re-assembly model of resurrection on theological, philosophical and scientific grounds.

I do not claim the proposed model to be either complete or to be the only scientifically, philosophically or theologically compatible one, but I propose that it may be a starting point for a constructive theological conception of general resurrection in a pluralist-secular age heavily influenced by science and naturalism as discussed by Taylor.¹¹⁴

I re-affirm the centrality of general resurrection for Christian belief since it ‘*completes God’s purpose in creating humanity by renewing the image of God in resurrected humanity.*’¹¹⁵ I have also briefly considered what such phenomena as GA and NDEs can contribute to the discussion of the epistemology and ontology of death, while rejecting reductive physicalism and animalism as both incompatible with Christian doctrine as well as unable to account for consciousness and a variety of mental phenomena.

¹¹⁴ Charles Taylor, *A Secular Age* (Cambridge, MA: Belknap Press, 2007).

¹¹⁵ Dunn, p. 488.