

THE 'SPIRIT' AND THE 'GROANING OF CREATION' IN ROMANS 8 SEEN AGAINST THE BACKGROUND OF MODERN SCIENCE¹

Klaus Nürnberger
Professor Emeritus and Senior Research Associate
University of KwaZulu-Natal

Abstract

Romans 8:19-22 is unique in its concern for the natural world. This is theologically significant at a time when ecological concerns have become inescapable and urgent. But this concern is packaged in an 'apocalyptic' eschatology that no longer seems plausible in modern times. This essay places the theology of Paul into the context of the Israelite-Jewish traditions, on which it draws, and Romans 8:19-22 into the context of Paul's theology of the 'Spirit' as opposed to the 'flesh'. Then it confronts Paul's eschatology with modern scientific insight, and tries to reconceptualise its essential message in a way that could make sense to our scientifically informed contemporaries. The 'age to come' is a vision of comprehensive optimal well-being that orients the human 'spirit', that is, the structure of human consciousness, towards God's benevolent intentionality. The divine 'Spirit' is the empowerment to participate in God's creative and redemptive agency.

Key Words: Ecology and Eschatology, Flesh and Spirit, Spirit and Eschatology, Science and Faith, Entropy and the 'Age to Come'

The Problem to be tackled in this Article

Paul's statement on the "groaning of a creation" in Romans 8:19-22 occurs within the context of a reflection on the nature of the 'spirit' as opposed to the 'flesh'. It presupposes the 'apocalyptic' distinction between the 'present age' and the 'age to come', which modern people find difficult to envisage.² Yet the statement that creation as such is to be set free from futility and decay also displays a concern for the natural world that is unique in the New Testament, if not the Bible as a whole. This is highly significant at a time when ecological concerns have become inescapable and urgent.

However, in which way can the expectation of an 'age to come' without futility, suffering and death help us tackle the problems we are faced with in the world we experience here and now? Expressed in more general terms, can an eschatology based on ancient scriptural patterns of thought develop traction in a situation informed by modern science? To participate in the gospel, Paul became 'all things to all people' (1 Cor 9:19-23). So it seems we have to do for our times what the biblical authors did for theirs.

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² The phenomenon of apocalyptic eschatology as such is not analysed in this essay. Significant for our analysis is merely its "urgent expectation of the *imminent* end of this world age and the inauguration of a *new aeon*", involving '*cosmic catastrophe*' (Carey & Bloomquist 1999:4ff; Cook 2003:80).

In this essay I position Paul's theology in the context of the Israelite-Jewish traditions from which his concepts of 'Spirit' and 'the age to come' are derived. Then I confront this eschatological theology with modern scientific theory, showing that its literal-ontological interpretation is no longer tenable. Finally I reconceptualise its essential message in a way that could make sense to our scientifically informed contemporaries.

The Israelite-Jewish Background

Romans 8:19-22 is found in Romans 8 as a whole, where Paul's juxtaposition of 'Spirit' and 'flesh' is spelt out. This chapter arguably forms the pinnacle of Paul's argument in the Letter to the Romans, and thus of Paul's theology as a whole. To understand Romans 8, however, we have to consider the complex of traditions in which Paul's stance is embedded:

1. The foundation of Old Testament theology is God's concern for *righteousness*. Righteousness denotes mutual faithfulness of Yahweh and Israel. It finds expression in the covenant Yahweh granted to Israel.³ Righteousness of the human partner is defined in terms of the stipulations of the Torah. The divine partner is expected to protect and bless 'his' people. Divine blessings are expected to materialise in this world. In pre-exilic Israel there is no notion of an afterlife. Yahweh's mastery is the precondition for Yahweh's righteousness to materialise. Late post-exilic eschatology emerged precisely because it appeared that Yahweh's mastery still needed final realisation.⁴
2. Yahweh is the Source and Giver of life. Life is understood in comprehensive terms: survival, progeny, health, status, fertility, prosperity, communal cohesion, political self-determination, social justice, spiritual fulfilment – all summarised in the concept of *shalom* (peace). Physical, social and spiritual concerns form one package. The link between righteousness and human well-being is radicalised in the link between *righteousness and life*, on the one hand, and *sin and death* on the other (Ps 90:3-9; Rm 6:23).
3. The two critical terms used by Paul in Romans 8, *flesh and spirit*, hark back to ancient Israelite anthropology.⁵ The basic meaning of *basar* is 'flesh' or 'meat'. It can be used for the meat of the sacrificial animal, or parts of the human body. The meaning can extend to the human body as a whole, blood relations, clan, ancestry, all fellow human beings and even humanity as such. But all living creatures are 'flesh'.

As description of the frail and decrepit existence of the creature, 'flesh' is contrasted with the divine. It does not last; it is not dependable, powerful, and self-sufficient. It blossoms for a short while, then withers and decays (Ps 103:15f). In religious and ethical terms, it is susceptible to temptation and prone to sin. Sin means that the human being moves beyond the sphere in which a wholesome life is possible, namely the sphere of an unblemished fellowship with God.

The conventional translation of *ruah* with 'spirit' is misleading. At the most basic level, *ruah* means wind or storm, thus air in motion. Applied to the human being it means breath, now understood as life-giving energy. As such it is granted by God to

³ See Levenson 1988:14-25 for this 'covenantal theonomy'.

⁴ According to Levenson, while Yahweh's *mastery* is basic for the Israelite religion (1988:3ff), it is not "a simple given", but "fragile, in continual need of reactivation and reassertion", sometimes "painfully distant from ordinary experience" (1988:47).

⁵ For the following I have utilised the analyses found in Wolff 1974:25-95 and Tenström 1993.

make life possible and taken away by God when the organism dies. As the life-giving 'breath' of God it stands in stark contrast to the 'flesh' (*basar*), which denotes creaturely frailty. Yet it is not an abstract idea of power. It is the divine power that *empowers* the human being.⁶

While human life as a whole depends on the divine *ruah*, there are special allocations of divine power, such as the authorisation and empowerment of great judges, prophets, and even artists (Ex 31:3; 35:31). *Ruah* grants special wisdom, sober judgment, discernment, but also fear of Yahweh, thus obedience, thus righteousness. According to Joel 2:28, *ruah* will be "poured on all flesh" – meaning the whole nation of Israel. So *ruah* is divine 'empowerment', rather than 'spirit'.

4. Hope for Israel's glory did not materialise as expected. In fact, Yahweh's primeval victory over chaos (Gn 1) is proclaimed and ritually enacted in the face of the experienced survival and persistence of chaos.⁷ With oppression and suffering becoming intolerable and inexplicable in view of the covenant between Yahweh and Israel, the Deuteronomic link between righteousness and blessing, on the one hand, and sin and calamity on the other, became untenable. The righteous suffered, the sinful prospered.

It appears that the proclamation of a general *resurrection* from the dead to face judgment emerged in late post-exilic Judaism as a response to the problem of theodicy.⁸ It was based on concern for divine justice and human righteousness, rather than human longevity. The righteous would not forfeit their reward; the sinful would not escape condemnation. It is found as such in many ancient religions, notably in ancient Egypt.

5. God is not a factor within reality, but the transcendent Source and Destiny of all such factors. While it is assumed that humans are fully responsible for their choice between good and evil, they have been overpowered by something greater than themselves. In Israel this power could be nothing but the power of Yahweh.

Pharaoh hardened his own heart, *because* Yahweh hardened the heart of Pharaoh (Ex 4:21). Saul is plagued by an evil spirit *emanating from* Yahweh that replaced the Spirit of Yahweh (1 Sm 16:14). We must work out our salvation, Paul says, *because* God brings about human intentionality and agency (Phlp 2:12f). God's Spirit bears witness with our spirit that we are children of God (Rm 8:16). So God's motivation and action do not obviate human motivation and action, but arouse and empower them.

During the exile, however, the Jews came into contact with the *dualistic worldview* of the Persians. The good god (*Ahuramazda*) and his army of angels battle it out with the evil god (*Angra Mainyu*) and his army of demons. Caught in the crossfire, humans end up on either side. In a final showdown (the battle of *Armageddon*) the forces of evil will be vanquished and destroyed in a pool of fire. Only what is good will survive. The

⁶ "From the outset, one must define *ruah* as a theo-anthropological concept" (Wolff 1976:57). According to Tengström, *ruah* is the divine creative power at work in the world (1993:402).

⁷ See the remarkable analysis of Levenson 1988, chapters 1-9.

⁸ "A clear hope in the resurrection can be discovered only at the end of the pre-Christian times." (Schwartz, in Musser & Price (eds) 1992:157). The notion of bodily resurrection remained controversial in Judaism, even during the time of Jesus (Mark 12:18). Ecclesiastes (Jesus Sirach), probably written in about 180 BC, is still in line with the ancient Israelite tradition (17:1-32 and 41:1 - 42:8). Here death is seen as a decree of God that we better learn to live with. Wisdom of Solomon (1:12-3:19) written in the first century BC, on the other hand, launches a robust argument in favour of the notion of resurrection. However, his argument shows that when it comes to resurrection, it is righteousness, rather than longevity, that was the central concern.

message is that evil has no right to exist in this world. Humans would rise and share either the fate of the evil power, or the new age of righteousness and bliss.

The Jewish equivalent of this worldview is found in the apocalyptic tradition and some other sources such as the ‘War Rule’ of Qumran and the Book of Jubilees.⁹ It is debated how far Persian religion influenced Jewish apocalyptic thought, but it would be strange if it had not.¹⁰ Obviously apocalyptic authors used ancient Israelite traditions prolifically and also had strong roots in late prophetic theology. However that may be, it had a powerful direct and indirect impact on early Christian theology, including Paul.

According to this worldview, evil was a counter-divine power of its own.¹¹ Sin was more than moral failure. Death was more than the end of life. Sin and death were deemed transcendent powers that had to be defeated and destroyed – which only the power of God could do. This is critically important for an understanding of Paul. Being ‘flesh’, even believers are no match for the power of evil (Rm 7).

To complete the picture, one has to mention the impact of Hellenistic thought patterns on the late post-exilic Jewish tradition. Platonic metaphysics tried to get out of time into eternity, out of space into universality, out of power plays into harmony, out of existence into essence, out of imperfection into perfection. It posited a pre- and post-existent world of ideas that were incarnate in, enslaved by, and corrupted by matter. At death an immortal soul would be released from the mortal body and go back to the divine sphere to which it belongs.¹²

In contrast with Platonism, the biblical concept of God is situated in the actual flow of life. It denotes intentionality and agency rather than ontology. It assumes the operation of creative and redemptive divine power in a needy world. It is open, unfinished, dynamic, future-directed, transformational, geared to actual experience.¹³ Hellenistic assumptions had an enormous impact on Judaism and Christianity, but their impact on Paul was minimal. Though a Hellenistic Jew, he was a Pharisee firmly rooted in the Old Testament and postexilic Judaism.

Paul’s Version

The Letter to the Romans is the only systematic presentation of Paul’s theology. It shows how deeply Paul’s theology is rooted in the Israelite-Jewish tradition. Its central concern is the righteousness of God and its human manifestation (Rm 1:16f).¹⁴ Paul formulates his stance against the Jewish-Christian insistence that righteousness is defined by the

⁹ “(O)ver time apocalyptic ideas and language became increasingly widespread and diffuse within early Judaism” (Cook 2003:81).

¹⁰ Cf. Cook 2003:33f.

¹¹ The Babylonian myth of creation (the *enuma elish*) attributed primeval power to the forces of chaos (*Tiamat*), but in its Jewish demythologisation (Gn 1:1-10) chaos (the primeval ocean) had lost all power to the creative act of God (Levenson 1988:121ff).

¹² Aristotle rejected the pre-existent idea, but posited a ‘form’ that gave shape to concrete entities and possessed a ‘teleological’ thrust towards overcoming the imperfections of its material encasement on its way to perfection.

¹³ The speculative postulate that nothing is impossible because God is, by definition, omnipotent, is something entirely different from the biblical reassurance that God, the Creator of the universe, is in charge of a precarious situation and may know ways out that are hidden to our eyes.

¹⁴ Individual forgiveness as understood by the Reformation indeed does not cover Paul’s concept of justification, but it is also more than a matter of ‘honor and shame’ (Jewett 2002:41-45). According to Luther what matters is the *iustitia aliena* (the righteousness of Christ) in which we are allowed to participate.

stipulations of the Torah and that salvation can only materialise through their fulfilment. He argues that all humans – Jews and Gentiles – have fallen victim to the power of sin and death and cannot rescue themselves by keeping the law (Rm 1-3; Rm 7).

In spite of its good intentions, the law only makes matters worse (Rm 7:7ff). It can expose sin, but it cannot redeem. Without Christ, humans are found guilty and condemned to death. The law is made ineffectual by sin and we must first be liberated before its intention can be fulfilled in us (Rm 8:3f). In Christ God opened up a new way of salvation. God sent Christ, being sinless, into the sphere of sin, law and death for our sakes, where he suffered the consequences (Rm 8:3f).

This is not simply meant to refer to the traditional atonement sacrifice.¹⁵ Rather, just as in the case of a widow, death cancels previous commitments and makes new commitments possible (Rm 7:1-3). On the cross, death takes its toll; the mechanisms of sin, law and death run their course, are condemned, lose their power and are replaced by the 'Spirit', manifest in the new life of the risen Christ.

By his resurrection, Christ was proclaimed 'Son of God', that is, the messianic representative of God (Rm 1:5).¹⁶ That happened 'according to the Spirit of holiness', as opposed to his 'fleshly' ancestry.¹⁷ His resurrection was brought about by the Spirit of God (Rm 8:11).¹⁸ It elevated the new life of Christ in fellowship with God to universal validity and opened it up to universal participation.

Believers identify with the death and the new life of Christ through faith. This identification is ritually enacted in baptism (Rm 6) and realised in their ethical conduct. Death to sin, thus to the law, means participating in the new life of Christ (Rm 8:29), which is a life of love (1 Cor 13; Rm 12:9-21; 13:8-10). Believers are translocated from the old power sphere of sin and death into the new power sphere of the Spirit of life (Rm 8:2). Faith is not a new enslavement under the law, but freedom and responsibility (Gl 5:13-15).

Faith implies rejection of the flesh and living in the Spirit (Rm 1:4-8). Whereas setting your mind on the 'flesh' is death, because the 'flesh' is not subject to God, setting them on the 'Spirit' is 'life and peace' (*shalom* – Rm 8:6f).¹⁹ This is how reconciliation with God takes place (2 Cor 5:16-21). It is 'in Christ' that the "just requirements of the law" can be fulfilled (Rm 8:4). It is the act of faith, rather than fulfilment of the law, that grants participation in the righteousness of God as manifest in Christ (Rm 1:17).

Reconciliation with God again implies reconciliation with each other. As God has suffered us in Christ, we suffer each other. It leads to the mutual acceptance between the 'weak' and the 'strong' (1 Cor 8; Rm 14),²⁰ between the 'members of the body', that is, the

¹⁵ Lohse 2003:231.

¹⁶ Cf. Nürnberger 2002, chapter 9 for the underlying tradition. On the basis of Psalm 2:7ff I do not understand why Lohse and others maintain that Israel did not know the legal form of adoption (2003:241).

¹⁷ Käsemann calls the Spirit the 'power of resurrection', or the 'power of eschatological re-creation', or the 'power of grace', or the "earthly presence of the elevated Lord" that grabs believers already in this life to redeem them from the power of sin and death (1974:205, 208f, 214, etc.).

¹⁸ Romans 1:3 is usually taken as a formula taken over by Paul from an older source, but as 2 Corinthians 5:16f shows, it fits his theology perfectly well.

¹⁹ With many others, Lohse believes that death here does not refer to physical death, but to the 'perdition' of not being able to remain before God, thus sinking into nothingness (2003:238). In terms of Israelite-Jewish holistic thinking this differentiation is artificial. Physical death is the manifestation of not being able to remain before the living God.

²⁰ I am rather puzzled by Jewett's suggestion that "...the strong were attempting to disqualify the weak for their suffering and vulnerability as signs of their standing under a divine curse ..." (thus following the scheme of

bearers of different *charismata* (1 Cor 12-14; Rm 12:3-8), between the participants in the Lord's Supper (1 Cor 11:17-34), and between Paul and the Corinthians.

Expressed in different terms, believers become part of a 'new creation' (2 Cor 5:14-17). 'New creation' again should be understood in cosmic, rather than narrow spiritual terms. The new life in Christ anticipates the 'age to come'. By the cross of Christ, Paul says, "the world has been crucified to me, and I to the world." (Gl 6:14).

Pneuma is not a divine substance, as in Hellenism, but divine empowerment, as in the Old Testament. Without change of meaning, it is variously called 'in the Spirit', 'in Christ', 'according to the Spirit', 'according to Christ', being 'members of the Body of Christ', 'having the Spirit of Christ' (Rm 8:9), or simply 'the Christ' (1 Cor 12:12).²¹ Christ and the Spirit belong inextricably together. Who does not have the Spirit of Christ, does not belong to him (Rm 8:9).

'In Christ' denotes participation in a new way of being human and therefore being part of the corporate body of a new humanity determined by the 'Spirit', that is, the 'Body of Christ' (1 Cor 12:12ff). Paul expresses the disjuncture between 'flesh' and 'Spirit' in mythological terms by contrasting Adam (representing sinful humanity) with Christ (representing authentic humanity – Rm 5:12-21; 1 Cor 15:42-49).²² Christ is here the new humanity living in fellowship with God, empowered by the Spirit of God to produce good fruit (Gl 5:16-25).²³

Pauline Eschatology

So the empowerment of the Spirit leads to a righteous life already here and now (Rm 8:1; 4-8). Participation in the death of Christ through suffering leads to participation in the new life of Christ, producing fruits through our mortal bodies (2 Cor 4:7-12, Phlp 1:22). However, according to Paul, participation in the death and the new life of Christ constitutes a *provisional* dispensation, pending our own death and resurrection.

To be 'adopted sons (and daughters)²⁴ of God' and fellow heirs with Christ means participation in *contemporary* suffering and the *future* glory of Christ (Rm 8:17).²⁵ It is made possible by the Spirit as 'first fruit' (Rm 8:23), or 'down-payment' (2 Cor 1:22; 5:5). It manifests itself in 'gifts of the Spirit' to serve the 'Body of Christ', the community of believers (1 Cor 12). However, it is also marked by an existential battle (Rm 6; Phlp

Deuteronomy 28) and that the latter refers to Jews persecuted by the Romans (Jewett 2002:39ff;49ff). 1 Corinthians 1-4 is about Paul's poor showing in comparison with the brilliance of Apollos. In 2 Corinthians 10-12 it is Paul who is lacking in boldness and authority. In 1 Corinthians 8 and Romans 14 the weak are those who have a conscience about meat offered to the idols. It seems the modern problem of the 'prosperity gospel' is here imposed on the ancient text.

²¹ Lohse 2003:232ff.

²² There is no 'causal relation' between Adam's sin and our sin, or an 'identical repetition' (Bell 2002:25, 28), but we **are** 'Adam'! And we **can be** 'Christ'. Paul posits these as alternate and parallel modes of being. We share in the suffering and death of Christ so as to also share in the power of his resurrection (2 Cor 4:10f) with the prospect of dying and rising into the new life (1 Cor 15:20-22).

²³ "(T)he deeper levels of Paul's thought" are not found in the judicial categories, but in "...those which express the participation of the faithful in Christ or in the Spirit, a participation which produces a real change" (Sanders 1991:74).

²⁴ 'Son' (*huios*) is here used to link up the believers with the traditional concept 'Son of God' as applied to Christ. In Romans 8:16 the word is replaced with 'children' (*tekna*). For Paul this includes Jews and Gentiles, men and women, slaves and free (Gl 3:23-29).

²⁵ For the concept of 'heir' cf. also Galatians 4:1-7 (Lohse 2003:227; 240; 242).

3:7-14). Our 'sonship' will materialise fully and finally only when our own death and resurrection occurs (Rm 8:23; 2 Cor 4:14).²⁶

Paul's contentions must be seen, therefore, in the context of the 'apocalyptic' dualism between *this age* (where the power of evil – thus sin, law and death – reign supreme) and the *age to come* (where this power has been vanquished for good through Christ's death, resurrection and victory). Faith is trust in something that cannot (yet) be seen. We have been saved 'in hope' (Rm 8:24-26). We now see through a dim mirror, then from face to face (1 Cor 13:12).

Though anticipated in faith, and already powerfully transformative in this life through the power of the Spirit (2 Cor 3:17f), redemption lies in the eschatological future, either when Christ returns (1 Th 4:13-18; cf 1 Cor 15:42-44), or beyond death (Rm 8:11, Phlp 1:23). As long as we are in this life, we groan and yearn for 'the redemption of our bodies' (Rm 8:23f). Though transformation begins here and now, therefore, we still have to die and rise into the new life.

Paul's theological reflections articulate the *personal* embeddedness of believers in a *cosmic* drama that is about to happen.²⁷ Romans 8:19-26 shows that, in Paul's view, the 'age to come' will be a comprehensively restructured universe – including not only a few souls, but living bodies; not only the empowered 'sons of God', but the entire creation now groaning under the oppressive powers of futility and death (Rm 8:19), brought upon them by God because of the sin of Adam.²⁸

Similarly everything – the groaning of the entire creation, the groaning of those who already received the deposit of the Spirit, and even the groaning of the Spirit itself – looks forward to the outstanding glory (Rm 8:19-26).²⁹ This text shows beyond any reasonable doubt that Paul's theology operates within an 'apocalyptic' framework, albeit without engaging in speculations about what exactly will happen in the 'age to come'.³⁰

Paul can refute the Deuteronomic link between righteousness and earthly blessing on the one hand, and human suffering and divine wrath on the other *only* because of the eschatological horizon of his theology. All things work for the (eschatological) good for those who love God and are called to his purpose, namely "to be conformed to the image of his Son, the first born among many brothers" (Rm 8:28f). On the basis of his eschatological assurance Paul can say that no calamity, predicament, earthly or heavenly power, or whatever else, can ever deprive us of the love of God in Christ – thus of the eschatological outcome (Rm 8:31-39).

²⁶ The Persian view that the battle between good and evil rages in this age in anticipation of the decisive and final battle shows how 'present eschatology' and 'future eschatology' (already, but not yet) are linked.

²⁷ Paul did not 'spiritualise' the 'new creation' and added the passage on the 'groaning creation' just because a new body can only exist in a new world (Räisänen 2002:17). "The thought process of Chapter 8 is a continuous argument without sharp breaks that would demarcate the different sections" (Lohse 2003:227).

²⁸ For this explanation of cosmic evil in Judaism see Lohse 2003:246f.

²⁹ Lohse 2003:244; 246.

³⁰ There is a tendency to discount Paul's apocalyptic heritage, making this text an awkward abnormality within an otherwise spiritualised context that needs to be explained. But as Käsemann has demonstrated throughout his work (1974), Paul's juxtaposition between the power of death and the power of resurrection forms the bedrock of his entire argument. The resurrection of Christ as "the beginnings of God's eschatological dealings with humanity" (Wischmeyer 2002:87) is embedded in the discontinuity between this age and the age to come.

Finally, just as for the Old Testament, for Paul a human being is a holistic, spiritual and bodily concrete being, not something spiritual added to something biological.³¹ According to 1 Corinthians 15:44, the new 'spiritual' (*pneumatikon*) human being is as much a bodily human being as the old *nephesh*-like (*psychikon*) human being.³² This shows that, for Paul, 'body' does not denote a biological organism, but the concrete organ that makes us capable of living in relationships – whether with Christ, the community of believers, or the prostitute (1 Cor 6:12-20; 12:12-27).³³ A body can be either 'one flesh' with a prostitute, or 'one spirit' with Christ (1 Cor 6:16-17). The question is whether this entity is under the power of the 'present age' (flesh) or 'the age to come' (Spirit).

Biblical Future Expectations in the Light of the Natural Sciences

The sketch offered above shows that for Paul the 'new age', the 'risen Christ', and the 'Spirit' belong inextricably together. However, it also revealed a complex network of traditions that cannot simply be presupposed or appropriated by contemporary believers informed by the natural sciences. Modern scientific theories profoundly question a literal-realistic interpretation of the eschatological visions, myths, symbols and metaphors found in the Bible. Such an interpretation also misses their originally-intended meaning. Let us see why.

The theory of *cosmic evolution* assumes that the reality we know began with the big bang approximately 13.7 billion years ago and has evolved in a continuous process ever since. So, there was never an ideal state of the world or a perfect human being 'in the beginning' of time. The most advanced state of reality is the one we experience today. Similarly, neither the human being nor the cosmic process as a whole is headed for a perfect state at the 'end of the age'.

The theory of *emergence* says that the evolutionary process moves in stages.³⁴ Higher levels of reality become more organised, complex, flexible, volatile and transitory than their lower antecedents. A higher level of emergence depends on all lower levels of emergence, but it is something different from its lower level components. If hydrogen and oxygen interact they form water, which is a new kind of reality that has characteristics entirely different from these two gases. This theory implies that the 'spiritual' dimension of human reality is embedded in the hierarchy of emergences and cannot subsist on its own. It can also not be transformed into a state that becomes independent of time, space and energy.

The theory of *entropy* says, in its most general sense, that energy has the tendency to move from order (low entropy energy) to disorder (high entropy energy), from compaction to dispersion, from high potency energy to spent energy.³⁵ The dissolution of compacted

³¹ Lohse 2003:248.

³² Paul is not always consistent in his terminology. In 2 Corinthians 5:6 and Romans 8:10 and 13 he contrasts 'the body' with 'the Lord', or 'the Spirit', suggesting the Platonic dualism between body and spirit. But 'body' here assumes the meaning of 'fleshly body' (Lohse 2003:238). In the passage 2 Corinthians 5:1-5 as a whole, Paul rejects the idea of potential 'nakedness' after the destruction of the 'earthly tent' (the Platonic bodiless soul), arguing that God makes it possible for 'what is mortal' to be 'swallowed up' by (eternal) life. Similarly, in Romans 8:11 the Spirit leads to the resurrection of the mortal body.

³³ It is not only the "earthly ability to communicate" (Käsemann 1974:312), but also with 'the Lord' now and in the eschatological future.

³⁴ For the theory of emergence see Clayton 2006, chapters 1-3, and Kauffman 2008:10ff.

³⁵ The concept of entropy was initially formulated as the Second Law of Thermodynamics. It has since found wide interdisciplinary applications. For a cosmological view and its theological implications see Russel 2002:3ff.

and organised energy provides the power that drives the cosmic process forward in time and space, including its evolution in ever more complex and subtle levels of emergence.³⁶ The bad news is that the entropic process is inherently and inexorably destructive. Every construction goes at the expense of a greater amount of destruction elsewhere in the system.

In cosmic terms, this means that, once all energy has dissipated and equilibrium is reached, it will reach a final state of dissolution and stagnation will set in. Nothing will be able to exist or happen. Alternatively, gravity may pull the dissipated energy together again so that the entire process is reversed and the universe collapses into a singularity (a giant 'black hole'). This is commonly called the 'big crunch'.

Neither of the two alternatives leaves any hope for history heading towards a 'new heaven and earth', or a glorious 'Kingdom of God' in realistic-ontological terms. These findings force us to rethink the *rationale* of biblical eschatology.³⁷ It is not a prediction, but a vision of what *ought* to become in response to concrete experiences of what *ought not* to have become. It proclaims the benevolent intentionality of God *in the face of* all experiences to the contrary. It is a statement of faith, a commitment to the wholeness of God's creation, a protest against all kinds of depravity and evil.³⁸

The vision of what ought to be is, by its very nature, transcendent. Transcendence can only be expressed in metaphors, symbols, parables, and myths.³⁹ God as such 'dwells in an unapproachable light' (1 Tm 6:16). Transcendence cannot be observed, explained or predicted. It can only be envisaged, trusted, and acted upon. 'Nobody has ever seen God.' The only way we can have communion with God is through participating in God's creative and redeeming love in this world (1 Jn 4:12-16).

The same reconsideration is necessary for our understanding of life, including the life of the human being.⁴⁰ Life emerged and evolved within the cosmic evolutionary process and is subject to the law of entropy. All forms of life depend on the entropic process for their energy. If the sun would not burn up, releasing energy processed by plants, none of us would live. All life emerges, evolves, deteriorates and decays. All higher forms of life depend on the death of other life. Death is the price to be paid for having life in the first place.

This calls for some theological boldness. We must face the fact that death is not the result of human sin, thus a symptom of the estrangement of the human being from the Creator. It is also not a quasi-divine enemy of God that can be, and must be, overpowered. It is, rather, an intrinsic and inescapable consequence of the processes of life itself as

³⁶ Sachsse argued that evolution is the shortest available route towards total dissipation, just as the meandering of a river through mountainous terrain is the shortest available route for the river towards the ocean (Sachsse 1984:6ff).

³⁷ Russel draws attention to the fact that the entropic process precludes the physical transformation of the current universe into a 'new age' – a fact largely overlooked in the science-religion debate (Russel 2002:3-15). After painstaking research and argument, however, he returns to the eschatological tradition and against the (absolute) validity of scientific theory (Russel 2008:23f).

³⁸ The relatively novel assertion of God's unlimited mastery in Second and Third Isaiah is "a confession of faith rather than an unexceptionable description of self-evident reality." It is essentially "cultic in character" (Levenson 1988:127).

³⁹ For the distinction between 'immanent transcendence' and 'radical transcendence' see Nürnberger 2010.

⁴⁰ The evolution of *homo sapiens* "...offers fascinating challenges to traditional Christian theology, since it now would no longer be possible to claim some past period in which humans possessed moral perfection in a paradisaical situation" (van Huyssteen 2000:133f).

created by God.⁴¹ Injudicious attitudes, actions and life styles may indeed lead to unnecessary suffering and premature death, but suffering and death as such cannot, and will not, disappear as long as the reality we know persists.

‘Spirit’ in the Light of Current Scientific Insight

The natural sciences know only of one reality, the one that we experience. The ‘age to come’ represents a vision of what *ought* to become whose only referent in this world is its negative, the experience of what *ought not* to have become. This implies a value judgment as well as a vision of something not real (as yet). However, a vision is not an observation, description or prediction.

The ‘Spirit’, in contrast, does refer to something experienced as *already* present within immanent reality, although it is deemed only a provisional anticipation of its full realisation in the future. As an experience of real existential change during this life, the human manifestation of the ‘Spirit’ is amenable to description and analysis. The ‘transcendent’ element only consists of value judgments, namely its desirability and its provisionality, both of which lie beyond the scientific method and mandate.

As we have seen, the biblical concept of ‘spirit’ denotes human intentionality and agency empowered by God to conform to God’s creative and redemptive purposes and actions. For Paul it takes hold of believers, liberates them from the power of sin and empowers them to participate in the new life of Christ. The character of this change can be described as the opposite of the concept of ‘flesh’ that denotes the frail, vulnerable and sinful human reality estranged from God.

In scientific terms, ‘mind’ is an emergent reality that builds on the organic entity of the brain.⁴² ‘Spirit’ is structured and oriented consciousness. This structure is based on a network of synaptic connections between neurons in the brain that can be switched on or off. It is formed by genetic predisposition, infant ‘hardwiring’, and the continuing flow experiences and information. Therefore we can speak, at the individual level, of a contrite or an arrogant spirit, spiritual growth, spiritual emptiness, or a spirited attack.

These mental structures and processes can be communicated through symbolic representations, such as language, rituals and gestures, which replicate and reinforce these structures in other consciousnesses. A large flow of such symbolically transferred bodies of meaning gradually form a structured collective consciousness. At this level we can speak of the spirit of a constitution, the national spirit, the ethos of an enterprise, or the spirit of a meeting.

Theological Consequences

Spirit of whatever kind depends on the entire non-spiritual infrastructure of emergence. As a pattern of symbolic representations, spirit can be transferred from person to person, and from generation to generation. In this sense it can persist beyond the death of a particular carrier. But there can be no spirit that could survive, subsist and function without its underlying neurological, biological, chemical, physical and subatomic processes. God’s Spirit, that is, God’s benevolent intentionality, is engaged in a process of renewing the human spirit.

⁴¹ The theory of evolution “...inserts human beings into the stream of all life and puts all life into the context of the all-embracing cosmic reality” (Häring 2000/1:24).

⁴² For detail see Clayton 2006:107-149.

Scientifically speaking, therefore, the change from 'flesh' to 'Spirit' denotes a process of restructuring and reorienting human consciousness. This change happens in the synaptic networks of the brain. It empowers the control of the frontal cortex over the reptile brain and the limbic system. Yet the reptile brain and the limbic system are indispensable for life and tend to assert their power. That is why the change from 'flesh' to 'Spirit' reflects the creative and redemptive intentionality of God only in a provisional, partial and inadequate way, and why there is a constant tug of war between 'flesh' and 'Spirit'.

The Holy Spirit is a particular structure of human consciousness that reflects God's creative and redemptive intentionality and agency as manifest in the Christ-event. The theologically relevant question, therefore, is not whether the spirit is divine or human, but whether it is authentic or inauthentic; life-enhancing or life-obstructing; redemptive or demonic; geared to God or to an idol. The 'Holy Spirit' must be contrasted, therefore, not with the human spirit, as if the human spirit could not be holy, but with an 'unholy spirit'.

Such a 'holy spirit' will alleviate the groaning of creation (including human bodies) as far as possible, try to overcome the causes of premature and violent death, and serve the optimal unfolding of life in all its forms as long as it lasts. The ecological concern of Christians, therefore, emerges from the spirit of creative and redeeming love motivated and powered by divine love as manifest in Christ. That is the gist of the matter.

Becoming Scientists to the Scientists

Is this re-conceptualisation biblically justified? Are we not bound to biblical visions of the future? No, we are not.⁴³ The Bible itself is not. In biblical times the 'Word of God' functioned as a dynamic response to changing human predicaments, depravities and worldview assumptions.⁴⁴ It became, "all things to all people", as Paul has it (1 Cor 9:19-23). The distinction between 'this age' and the 'age to come' presents us with one set of future expectations among many others.

Abraham needed male progeny. Israel needed liberation from Egyptian slavery; sustenance in the desert; the Torah as a social-ethical structure; a land to settle; victory over enemies; a king to consolidate its power against Philistine raids, and so on. Jesus responded to people in need of healing, forgiveness, acceptance, food and social justice. The 'risen Christ' was God's response to the catastrophe of the cross that re-empowered the disciples for their mission in the world. The 'Spirit' forged a community that transcended ethnic, religious and political diversity.

As time went on, biblical authors routinely abandoned, reformulated, or replaced time bound expectations that had lost their urgency or relevance. Male progeny; possession of the 'promised land'; a political kingdom; Jerusalem as world capital; the temple as religious centre; priesthood and bloody sacrifices; the return of the Diaspora to Palestine – all these motives had lost their urgency by the time the New Testament was written.

Other expectations inherited from the tradition were reinterpreted, sometimes drastically so. Abraham became the 'father of faith'; Israel became the new people of God drawn from

⁴³ There is a curious fixation to a literal-ontological interpretation of resurrection and cosmic transformation in some science-religion debates (e.g. in Peters, Russel & Welker 2002). "If it is impossible it cannot be true. But if it is true, it cannot be impossible" (Russel 2002:16). Conversely, Peters says, if big bang and entropy cosmology turn out to be valid, "...we would have proof that our faith has been in vain. It would turn out to be that there is no God ..." (p. 8). No, that does not follow! A residual biblical or dogmatic fundamentalism has crept in here through the backdoor.

⁴⁴ For a systematic analysis of this phenomenon see Nürnberger 2002.

Jews and Gentiles; the messianic king became the crucified Christ; human sacrifices to God became a divine sacrifice to humans; the 'holy city' destroyed by the Romans became the 'New Jerusalem' descending from heaven; the Sabbath became 'eternal rest' – and so we can continue. The point is that history moves on, and God's redemptive response to human need does not stay behind.

The notion of a resurrection from the dead to face judgment and the apocalyptic expectation of a new heaven and earth emerged and evolved in late post-exilic Jewish history. They were the most radical and 'otherworldly' in a whole series that, in general, was much more down to earth. They were usually (though not exclusively)⁴⁵ meant to be redemptive reassurances in response to oppression, persecution, suffering and frustration.⁴⁶ They remained controversial within Judaism.

They played a critical role in early Christianity, but began to be replaced already in New Testament times when the expected second coming of Christ did not materialise.⁴⁷ Paul already emphasised the anticipatory reality and effectiveness of the 'age to come' in 'this age' through faith and the power of the Spirit. In 2 Corinthians 3:17f and 1 Corinthians 15:42-52 he made it clear that the 'new creation' was a 'spiritual', rather than a 'fleshly' reality and manifested itself in a new life here and now (Rm 6).

The Deutero-Pauline letters (Ephesians and Colossians) could easily latch onto this heritage. They moved the emphasis from the future victory and glory of Christ (1 Cor 15:23-28) to his present status above all cosmic powers (Eph 1:20-23).⁴⁸ Christ has *already* been enthroned at the right hand of God in the 'heavenly places'. Having been 'dead in sin', we have *already* been raised and enthroned with him (Eph 2:4-6; Col 1:13; 3:1f). Obviously these spatial concepts are metaphors for the change from inauthentic to authentic existence through participation in the new life of Christ.

According to John's Gospel the 'last judgment' happens whenever one encounters the living Christ and opts for him or against him (Jn 3:17ff; 5:24). The risen Christ is represented by the Spirit (Jn 14:16-23; 16:7, :13-14). Participating in Christ's self-giving love, believers are in Christ, as Christ is in God (Jn 15:9-11; 1 Jn 4:12f). None of these shifts abandoned the idea of a future reconstruction of the universe altogether, but the new focus made it possible for disillusioned Christians to continue a life in faith under changed circumstances.

The Rationale of Eschatological Assumptions

Does this insight destroy Christian hope? Not at all! A reality-transcending vision fixes our attention on what *ought* to be and grounds that in ultimate validity, that is, in God's creative and redemptive intentionality. It transcends immanent inevitabilities and obstacles. It makes us build our lives on faith and trust, rather than evidence. It opens up the horizons of time, space, power and potentiality. It gives hope, direction, motivation and dedication.

It proclaims God's benevolence in the face of experiences to the contrary. It makes us bold to protest and act against all manifestations of evil, whether personal, social or natural.

⁴⁵ Carey & Bloomquist 1999:7; Cook 2003:31ff.

⁴⁶ "(T)he intention of these (eschatological) texts is to point beyond themselves to social situations and mystical experiences" (Collins 1996:19).

⁴⁷ The implications for the proclamation of the death, resurrection and elevation of Christ are spelt out in Nürnberg 2011:258-264.

⁴⁸ For the difference between Paul and the Deutero-Pauline letters see Hahn 2002:123-125.

It fortifies our resolve to withstand failure, frustration, fatalism and despondency – and that to a degree not available in any other way. As such it is exceptionally functional and indispensable for a wholesome human life. As long as the future is open, there is a vision, and where there is a vision, there is a mission.

But to make sense in the modern world, it must be geared to God's vision of comprehensive optimal well-being, rather than a quasi-empirical dream world or paradise. The vision of God is like a shifting horizon that opens up ever new vistas, challenges and opportunities. It does not envisage an eventual 'end' to time and space, but remains geared to potential change in the foreseeable future (*Naherwartung*). It is not a kind of 'eschatology' that predicts the 'last things' expected to happen in the distant future but propagates the authentic version of the inauthentic reality we experience here and now.

This (seemingly utopian) vision translates into concern for any deficiency in well-being in any dimension of life. It involves us in the dynamics of God's redemptive project in this world, giving us ethical direction and motivation. We can certainly try and overcome unnecessary suffering and prevent premature death – whether human or non-human. But we cannot expect a world void of pain and death.⁴⁹ We can try and ensure the survival and flourishing of the natural world, but we cannot stop living off its substance, thus destroying whatever falls prey to our needs and our gullibility.

So the 'age to come' is a vision of comprehensive optimal well-being that orients the human 'spirit', that is, the structure of human consciousness, towards God's benevolent intentionality. The divine 'Spirit' is the empowerment that allows us to participate in God's creative and redemptive agency. This interpretation does not clash with modern scientific insight. It also does not abandon the core assumption of the Christian faith, namely the creative and redemptive intentions of God, the transcendent Source and Destiny of reality, as manifest in the Christ-event.

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⁴⁹ God may be able to do anything that God wishes to do. But this remains pure speculation as long as God does not avail 'himself' of this possibility. There is a difference between the proclamation that all energy operative in the cosmic process manifests the power of God, including the regularities and constraints necessary for its operation, and the abstract concept of omnipotence, which assumes that God is not bound to any regularities and constraints whatsoever in God's dealings with God's creation.

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