that halts progress and leads nowhere is the great lie that asserts there is no difference in alienation between humans. The gospels predict the emergence of the artificially achieved undifferentiated, criticism-free world; a world where no fundamental difference between the ‘two people...in one bed’ is acknowledged. The emergence of ‘abomination that causes desolation’ is described as the ‘sign...of the end of the age’ (Matt. 24:3). It is a dangerous time that we now live in, where the more insecure have established a dishonest, pseudo-idealistic, ‘politically correct’, ‘postmodern’, artificially ‘deconstructed’, artificially undifferentiated, artificially criticism-free world. Our task as humans has been to understand the dilemma of our condition and in so doing render it obsolete and allow it to subside, not to abandon this search by transcending the whole issue and attempting to artificially impose an ideal state. That was a false way of living, promoted by false prophets; it halted progress towards self-knowledge and could only end in untenable levels of alienation, total, eternal ‘darkness’.

False prophets claimed that the way to achieve a reconciled, ‘new age’ for humans was for everyone to simply dogmatically adopt ideality, transcend their reality, deny their own and others’ alienation, ‘think positively’, ‘embrace their human potential and be at one with the cosmos’, and so on, when the real path to a reconciled new world for humans depended on going in the opposite direction, confronting the reality of humans’ corrupted state, penetrating the almost universal denial and solving the underlying issue of the human condition. True prophets attacked the denial while false prophets sought ways to embellish it. The immense danger of pseudo-idealism is explained in my 2006 book The Great Exodus: From the horror and darkness of the human condition that is published online at <www.worldtransformation.com/exodus>.

This time when pseudo-idealistic dogma would try to control the world was also anticipated by the prophet Daniel who, after warning of the ‘abominations’ that lead to ‘desolations’, accurately concluded, ‘but the people who know their God [those who are less alienated] will [must] firmly resist [the abomination of the dishonest world of pseudo-idealism]’ (Dan. 11:32).

The rise to dominance of pseudo-idealism in wealthier parts of the world and its counterpart of fundamentalism in the poorer parts of the world is the outward ‘sign of the end of the age’. With alienation at last able to be acknowledged and its extent revealed, it can be understood that the ‘four horsemen’ — ‘war, death, famine and pestilence’ — that herald the apocalypse, as described in Revelation 6 in the Bible, is the best description of a terminally alienated world that was possible before we were able to explain the human condition.

The demystification of God

The explanation of ‘God’ that is presented in Beyond was expressed in summary form in the Plato essay. In this, God was explained as being the metaphysical, religious acknowledgment of the fundamental truth of integrative, order-developing, cooperative meaning or purpose to existence, a direction to life that results from the law of physics called negative entropy. In support of this explanation the pre-eminent physicist, Stephen Hawking, said ‘I would use the term God as the embodiment of the laws of physics’ (in interview, Master of the Universe, BBC, 1989). It was also mentioned that the leading physicist, Paul Davies, said that ‘these laws of physics are the correct place to look for God or meaning or purpose’ (in interview, God Only Knows, Compass, ABC-TV, 23 Mar. 1997), and that ‘humans came about as a result of the underlying laws of physics’ (in interview, Paul Davies—More Big Questions: Are We Alone in the Universe?, SBS-
This recent quote from Stephen Hawking was also mentioned: "The overwhelming impression is of order [in the universe]. The more we discover about the universe, the more we find that it is governed by rational laws. If one liked, one could say that this order was the work of God. Einstein thought so... We could call order by the name of God, but it would be an impersonal God. There's not much personal about the laws of physics" (Sydney Morning Herald, 27–28 Apr. 2002).

This demystification of God as being the law of negative entropy has given rise to three particular concerns:

Firstly, there is the difficulty of the exposure that occurs with the demystification of God.

Secondly, there is the perception that Hawking alludes to above of the demystification seeming to make God ‘impersonal’, of seeming to present an interpretation of God that does not account for the spiritual dimensions that people have experienced and come to associate with God.

Thirdly, there is the concern that if God is negative entropy and negative entropy ends when the universe ends, either in the ‘heat death’ or the ‘big crunch’, then God is not infinite as religions have maintained. Each of these concerns will be addressed in turn.

The difficulty of exposure that the demystification of God brings

The *Plato* essay dealt at length with the problem of the confronting nature of the truth of integrative meaning. Integrative meaning implies that humans should behave cooperatively, selflessly and lovingly, but human behaviour has been quite the opposite; competitive, selfish and aggressive. If humans accepted the truth of integrative meaning without understanding of their divisive condition they would be left feeling suicidally depressed. While the human condition was not able to be explained humans had no choice but to live in denial of the truth of integrative meaning. In Plato’s cave allegory they had no option but to hide in a deep, dark ‘cave’ away from the exposing glare of the ‘sun’ and the ‘fire’.

As has been explained, religions were a way for humans to be honest about their corrupted, alienated condition without having to openly admit and therefore confront it. While the admission of being corrupted and alienated was implicit when they became ‘born-again’ to supporting the prophet’s sound words and life, they were not having to openly admit to it; it was not explicit.

Similarly, being able to use the word ‘God’ in an abstract sense, instead of directly acknowledging the cooperative, loving ideals and meaning of life—the ‘absolute good’ as Plato described it—saved humans from suicidal depression. The term ‘God’ was sufficiently abstract and thus remote to not confront humans directly with the truth of their corrupted, alienated state. This undefined gap of abstraction has protected people from exposure.

The difficulty with demystifying the concept of ‘God’ is that it destroys the comfort zone that the gap of abstraction provided. Having God demystified as negative entropy makes its integrative, cooperative, loving and selfless meaning inescapable.

It should be emphasised that prior to the demystification of God many people felt that even the abstract description of God was too confronting. While humans have not been able to explain the human condition, explain why they weren’t ‘bad’ or ‘evil’ for being corrupted, they have always intrinsically believed they weren’t fundamentally bad or evil. If humans had believed that they were fundamentally evil they wouldn’t have been able to stand against this implication the way that they have for 2 million years. As a result,
those humans who became extremely corrupted frequently took refuge in this greater truth and refused to accept any implied condemnation of themselves. While the concept of God was relatively abstract and thus not overly confronting, for some people it was sufficiently condemning to cause them to become atheists, asserting they did not believe in God. For similar reasons, with corruption, and its product block-out or denial or alienation increasing to extremely high levels in recent times, many people have turned to religions that do not emphasise God, such as Buddhism. It is worth quoting again the words from Deuteronomy in the Bible that articulate how hurtful confronting God can be: ‘Let us not hear the voice of the Lord our God nor see this great fire any more, or we will die’ (18:16).

Another means for alleviating the condemnation that people could feel from acknowledging God was to broaden the gap of abstraction, step further away from tolerating any interpretation of God, or of seeing meaning in any religious concept for that matter. People could deliberately avoid and resist any interpretation of what ‘prophets’ are, or what ‘the resurrection’ or the ‘Virgin Mother’ or the ‘miracles’ of Christ represent, or of the integratively orientated biological nature of our soul or psyche (soul is derived from the Greek word ‘psyche’), and so on. The more insecure people became the more fundamentalist or literalist they needed to be. Mindlessness saved people from hurtful mindfulness. Humans have been retreating deeper and deeper into the dark cave of denial for 2 million years. In Jung and The Story of Our Time, Sir Laurens van der Post railed against this increasing mindlessness of religion: ‘Yet the churches continue to exhort man without any knowledge of what is the soul of modern man and how starved and empty it has become…They behave as if a repetition of the message of the Cross and a reiteration of the miracles and parables of Christ is enough. Yet, if they took Christ’s message seriously, they would not ignore the empiric material and testimony of the nature of the soul and its experience of God that [Carl] Jung has presented to the world. He did his utmost to make us understand the reality of man’s psyche and its relationship to God. But they ignore the call’ (1976, p.232 of 275).

Some people have rejected all religions because even those religions that do not acknowledge God have not been sufficiently free of condemning implications. Secularism, the rejection of all forms of religious faith and worship, is on the rise throughout the world. My 2006 book The Great Exodus: From the horror and darkness of the human condition documents the development and support of ‘guilt-free’ forms of idealism such as Communism which, unlike its predecessors, does not contain any recognition of the world of soundness. Instead, Communism dogmatically demanded an idealistic social or communal world and denied the depressing notion of God and associated guilt. The limitation of communism is that while there is no confronting innocent prophet present, there is an obvious acknowledgment of the condemning cooperative ideals. In time, as levels of insecurity rose, the need developed for an even more guilt-free form of idealism to live through. This was supplied by the New Age Movement in which all the negatives of humans’ corrupted condition were transcended in favour of taking up a completely escapist, ‘human-potential’ stressing, ‘self-affirming’, ‘motivational’, ‘feel-good’ approach. The limitation of the New Age Movement was that while it did not remind humans of the cooperative ideals, the focus was still on the issue of humans’ variously troubled, alienated state. The next level of delusion dispensed with the problem of alienation by simply denying its existence.

The Feminist Movement maintains that there is no difference between people, especially not between men and women. In particular it denies the legitimacy of the egocentric male dimension to life. The limitation of Feminism is that while it dispersed
with the problem of humans’ divisive reality, humans are still the focus of attention and
that is confronting. The solution that emerged was the Environmental or Green Movement
where there is no need to confront and think about the human state since all focus is away
from self onto the environment. While it has been said that ‘The environment became the
last best cause, the ultimate guilt-free issue’ *Time* mag. 31 Dec. 1990, there was still a limitation.
In the Environment Movement there is still a condemning moral component. If we are
not responsible with the environment, ‘good’, we are behaving immorally, ‘bad’. In
addition, the purity or innocence of nature contrasts with humans’ lack of it. At this stage
a form of pure ‘idealism’ had to be developed where any confrontation with the, by now,
extremely confronting and depressing moral dilemma of the human condition was totally
avoided. This need for a totally guiltless form of ‘idealism’ was met by the development
of the Politically Correct Movement and its intellectual equivalent, the Deconstructionist
or Post-modern Movement. These are pure forms of dogma that fabricate, demand and
impose equality in complete denial of the reality of the underlying issue of the reasons for
the different levels of alienation between individuals, sexes, ages, generations, races and
cultures.

While humans lacked scientific explanation, metaphors and abstract descriptions
were useful tools for explaining the world; however, in their bid to avoid exposure of
their alienated condition some people took some metaphors and abstractions literally.
People have actually gone in search of the wreck of Noah’s Ark, while many think that
the story of David and Goliath is simply the description of a child slaying a giant man,
and that the fabled poem, *The Man From Snowy River* is merely a chase for a horse.
(The truthful meaning behind the stories of David and Goliath and *The Man From
Snowy River* will be explained shortly.) Many believe Christ literally rose from the dead,
literally walked on water, and that his mother was literally a virgin. Many believe God is
a supernatural, beyond-this-world being, an actual person up in the clouds, seated upon a
throne surrounded by people with wings. As physicist Paul Davies has said, ‘A lot of people
are hostile to science because it demystifies nature. They prefer the mystery. They would rather live
in ignorance of the way the world works and our place in it…many religious people still cling to an
image of a God-of-the-gaps, a cosmic magician’ (from Davies’ 1995 Templeton Prize acceptance speech).

Alienation is alienation; it is the need to avoid exposure, to maintain separation
from the truth, to stay hidden in the cave of denial. For those sufficiently insecure/
alienated, the ‘abstraction gap’ had to be preserved. The more insecure people were, the
more religious they tended to be—the bigger the church, the larger the gap between the
adherents and their soul—until they became so insecure that God became too confronting
to acknowledge, at which point the many less confronting forms of idealism mentioned
above had to be developed.

This situation suddenly changes when the dignifying understanding of the human
condition arrives, as it now has. It is now, at last, both safe and necessary to demystify
God, however for the more alienated it may initially seem too much truth to bear. Bringing
God down to Earth, so to speak, destroys the up-in-the-clouds perception of God, and
some people will prefer to stay with this transcendent, beyond-this-world, abstracted
view. As an illustration of this reaction, the Uniting Church minister, the Reverend Dr
David Millikan, who, as mentioned in the *Plato* essay was the architect and presenter
of the major public attacks on myself and the World Transformation Movement (the
organisation that has been established to promote these understandings of the human
condition), made the following comments about my work: ‘You know I’m a Christian. I’m
deeply committed, I have been since I was about 15 or 16 I guess to a relationship with God…Now
you talk about God but...there is no place within your system for a transcendent God [that is, for a] God that is beyond this world. We have two different perceptions about the nature of God because I talk about God as transcendent. That seems to me to be essential and I don’t know of any other way to relate to God" (WTM video 8 Feb. 1995). (The reader may wonder why I and the WTM agreed to participate in Reverend Millikan’s television documentary when the work of the WTM was an anathema to him. The reason we agreed was because he presented himself as being extremely understanding and appreciative of the work of the WTM—he said he wanted the documentary to be one part of a ‘16-part international documentary’ of ‘seminal thinkers from around the world’ who are capable of ‘taking humanity into the next millennium’. His true agenda to denigrate our work only became apparent in his one and only filmed interview with me, which turned out to be his final interview, which was too late for us to do anything about the documentary, except protest. As a result of his misrepresentation the WTM is suing him for deceit and defamation—see <www.worldtransformation.com/persecution> for a summary of our successful court cases.)

As was explained in the *Plato* essay, science has been mechanistic not holistic; it has avoided acknowledging integrative meaning because science, like humanity, had to live in denial of integrative meaning while humans’ divisive nature could not be explained. While some scientists have dared to acknowledge integrative meaning the majority have complied with this need to live in denial of it. In the *Plato* essay, an article titled *Science Friction* was quoted saying that the few scientists who have ‘dared to take a holistic approach’ have been seen by the scientific orthodoxy as committing ‘scientific heresy’. The article said that scientists taking the ‘holistic approach’, such as the Australians ‘physicist Paul Davies and biologist Charles Birch’, are trying ‘to cross the great divide between science and religion’, and are ‘not afraid of terms such as “purpose” and “meaning”’, adding that ‘Quite a number of biologists got upset [about this new development] because they don’t want to open the gates to teleology—the idea that there is goal-directed change is an anaethema’ (Sydney Morning Herald, Good Weekend mag. 16 Nov. 1991). The late, highly acclaimed biologist, Stephen Jay Gould, was one notable scientist who strongly opposed any attempt at reconciling science or mechanism with religion or holism. To quote a review of one of his last books, *Rocks Of Ages: Science And Religion In The Fullness Of Life* (1999), ‘Science and religion, he [Gould] argues, are separate domains of knowledge: the former deals with facts, the latter with meaning’ (Sun Herald, Sunday Life mag. 5 May 2002). Gould is well known for being an ardent mechanist, for strenuously opposing any acceptance of the existence of meaning in existence.

In his one and only interview with me, which turned out to be his final interview for his documentary about the WTM, Reverend Millikan made this comment about his inability to accept the demystification of God. When talking about Paul Davies, Reverend Millikan stated: ‘I said this publicly at one of the big dinners. I said, “You’re [Davies] pushing science into areas of theology which the scientists don’t like and you’re forcing theology in a way the theologians don’t like”, so it’s in that sense that I disagree with him’ (WTM video, 9 Mar. 1995).

As was explained in the *Plato* essay, while science and humanity had a responsibility to be mechanistic and not holistic, to live in denial of the issue of the human condition, it was wrong for anybody to abandon the democratic principle of freedom of expression to try to destroy any emerging holistic thinking—as was done by Reverend Millikan and his supporters. The opportunity for understanding of the human condition to emerge was always to be preserved.

Since science and religion provide two different perspectives on the one subject, namely the human situation, they must ultimately be able to be reconciled. In fact the reconciliation of religion and science, God and humans, holism and mechanism, ideality
and reality, good and evil was the goal of the whole human journey of the last 2 million years! The whole objective of all the efforts of conscious humans has been to solve the dilemma of the human condition, find understanding of human nature. The 1964 Nobel Prize-winning physicist Charles H. Townes emphasised this objective of reconciling science and religion when he said, ‘For they [religion and science] both represent man’s efforts to understand his universe and must ultimately be dealing with the same substance. As we understand more in each realm, the two must grow together…converge they must’ (The Convergence of Science and Religion, Zygon, Vol.1 No.3, 1966). Sir James Darling, one of Australia’s greatest educators, and former Chairman of the Australian Broadcasting Corporation (ironically the organisation that is currently persecuting the WTM for its reconciliation of religion and science!) has said: ‘The scientist can no more deny or devaluate the truths of spiritual experience than the theologian can neglect the truths of science: and the two truths must be reconcilable, and it must be of importance to each of us that they should be reconciled’ (from a 1954 address pub. in Darling’s 1962 book, The Education of a Civilized Man, p.68 of 223).

In his 1991 commendation for my book Beyond The Human Condition, the Emeritus Professor of Zoology at the University of Auckland and fellow of St John’s Theological College, Auckland, John Morton emphasised the importance of reconciling science and religion when he wrote: ‘Beyond The Human Condition is a book about anthropology and the human future. So it is necessarily about Christianity and importantly relates it—as Christianity must ultimately be related—to biology. It is a forward view of humanity’s moral progress and destiny’.

Australian biologist Charles Birch has also said that ‘Those who say that science and religion do not mix understand neither’ (from Birch’s 1990 Templeton Prize acceptance speech). Ultimately science had to become holistic and religion tolerant of having its abstract concepts interpreted scientifically. In his 1976 book, Jung and The Story of Our Time, Sir Laurens van der Post wrote that ‘There was, for instance, this progressive rift between religion and the scientific spirit. At their best, both seemed to be bound on the same quest. But I was…dismayed at their mutual failure to understand each other’ (p.38 of 275).

In religious texts and in the words of the prophets around which the great religions were founded there is acknowledgment that religions themselves looked forward to a time when their role of supporting humanity would be brought to an end by the arrival of understanding of the human condition. In Genesis in the Bible it says that one day ‘you will be like God, knowing’ (3:5). Christ was anticipating the time when humans would become all-knowing when he said, ‘another Counsellor to be with you forever—the Spirit of truth…[this] Counsellor, the Holy Spirit, whom the Father will send in my name, will teach you all things [in particular it will make it possible to explain the riddle of life, the dilemma of the human condition] and will remind you of everything I have said to you [make clear what he was only able to talk about in abstract terms]’ (John 14:16,17,26). As will be pointed out when the Trinity is explained, the ‘Holy Ghost’ or ‘Spirit’ is the nerve-based learning system, our conscious mind, which had to overcome the impasse of the dilemma of the human condition that occurred in the development of conscious thought. So the ‘Spirit of truth’ is the human intellect, of which science is the ultimate expression. It is science that elicits sufficient understanding of the mechanisms of the workings of our world to make clarification of the human condition possible.

Christ was also looking forward to the time when knowledge could finally make dogma and metaphysics obsolete when he said, ‘Though I have been speaking figuratively, a time is coming when I will no longer use this kind of language but will tell you plainly about my
Father’ (John 16:25). Again, as will be clarified when the Trinity is explained, the ‘I’ Christ refers to is the instinctive self or soul, of which Christ himself was an uncorrupted, perfect personification. As was explained in the Plato essay—when it was explained that science was the liberator and soul the synthesiser—while mechanistic science had to find all the details about the workings of our world that make clarification of the human condition possible, a denial-free, unevasive thinker or prophet was required to assemble the truth about the human condition from science’s hard-won but evasively presented insights. Science found all the pieces of the jigsaw of explanation but presented those pieces evasively, ‘picture-side down’, and as such it was impossible to assemble the ‘jigsaw’. The ‘jigsaw’s’ assemblage depended on somebody being able to flip over those pieces, expose all the hurtful truths; it depended on the involvement of a denial-free thinker or prophet. When Christ talked about the instinctive self, ‘I’, telling humanity ‘plainly’ about the ‘Father’, about God, he was recognising this involvement of an unevasive thinker or prophet in assembling the biological explanation of the human condition from science’s hard-won insights, and in the process necessarily demystifying and obsoleting religion.

It should be pointed out that in John 14, 15 and 16 where Christ talks about the ‘Counsellor, the Holy Spirit, whom the Father will send in my name…teach[ing] you all things’ and, ‘a time [that] is coming when I will no longer use this kind of language but will tell you plainly about my Father’, he is talking about the combined efforts of the intellect and soul, in the form of science and a denial-free thinker, being involved in the liberation of humanity. Both were necessary. The denial-free thinker had to draw upon what science has been able to impart about the workings of our world in order to synthesise the liberating truth about the human condition. For example in John 16:7,8,13 it says ‘When he [the Counsellor] comes, he will convict the world of guilt in regard to sin and righteousness and judgment…but when he, the Spirit of truth comes, he will guide you into all truth. He will not speak on his own; he will speak only what he hears [from the Father/ God]…All that belongs to the Father is mine [I am free of denial]. That is why I said the Spirit [the intellect/ science] will take from what is mine [will depend on the denial-free soul to be able to synthesise the truth about the human condition] and make it known to you.’ Clearly, to be speaking only from God, the ‘he’ being referred to is the soul-guided prophet. But what is being referred to by ‘Counsellor’, ‘the Spirit of truth’, coming to ‘guide you into all truth’ and by so doing bring about ‘judgment’ day or exposure day or truth day, is the science-guided intellect because it is only with the insights into the workings of our world that science has found can the truth about the human condition be synthesised.

It needs to be emphasised that the cooperatively orientated instinctive self contributed a key but minor concluding role in the liberation of humanity from ignorance. The difficult work was done by science. It had to patiently investigate reality, find first principle-based explanation of how our world works, in particular how the nerve-based and gene-based learning systems operate (the understanding that makes clarification of the human condition possible), all the while carefully avoiding any condemning truths about humans. Humanity’s real liberator or so-called ‘messiah’ was science. What was missing from the beginning of the human journey to enlightenment was not soundness, that has always been there to varying degrees, but sufficient knowledge to make clarification of humans’ fundamental goodness possible. The concepts presented in these pages are a synthesis (and reconciliation) of biology, physics, chemistry, philosophy, psychology and indeed
all the scientific disciplines. These explanations of the human condition are synthesised from the wealth of detail won at great personal sacrifice by the warriors of all the scientific traditions. However, science was only the institution created by humanity to investigate the mechanisms of our world and depended on the supportive structure of civilisation for its existence, and as such humanity as a whole is responsible for liberating itself from the human condition. In truth every human who has ever lived has contributed to this breakthrough.

In the Buddhist faith there is an anticipation similar to Christ’s of a time when humans would be liberated from the human condition. Buddha said, ‘In the future they will every one be Buddhas / And will reach Perfect Enlightenment / In domains in all directions / Each will have the same title / Simultaneously on wisdom-thrones / They will prove the Supreme Wisdom’ (Buddha [Siddartha Gautama] 560–480 BC, The Lotus Sutra, ch.9; tr. W.E. Soothill, 1987, p.148 of 275).

It is clear that both Christ and Buddha anticipated a time when understanding would replace dogma, a time when, through the development of science, denial-free thinkers would be able to tell humanity ‘plainly’ about God and therefore about the nature of humans’ relationship with the cooperative ideals or God. They looked forward to a time when understanding would replace ‘figurative’ speech or dogma, and when self-understanding or ‘Perfect Enlightenment’ would ameliorate the insecurity of the human condition thereby making ‘every one’ secure in self like denial-free prophets or ‘Buddhas’—thus ending the need for faith and religion.

Christ and Buddha anticipated an end to the need for religion, a time when understanding would replace dogma. The words of the prophets confirm that religions are not being threatened or destroyed by the arrival of understanding of the human condition, as some people fear, rather they are being fulfilled.

What is being obsoleted is the gap created by the use of abstract, metaphysical, mystical terms, the gap in which people were able to hide from excessive exposure to the truth of their corrupted condition, but, as stressed, the whole point of the human journey was to achieve that demystification. Humans are an understanding variety of animal, which means understanding is our responsibility and destiny. The purpose of science is to be a winnower of mystery, metaphysics and superstition, ultimately to explain the human condition, dignify humans and in the process demystify God.

Where is the spirituality in negative entropy?

It was mentioned that there are three particular concerns that occur in people’s minds when it is suggested that God is the laws of physics, in particular, the law of negative entropy. The first which has just been dealt with was the difficulty of the exposure that the demystification of God brings.

The second concern is that the explanation of God as the law of negative entropy seems utterly incapable of accounting for the spiritual dimension that people have come to associate with God. Hawking raised this concern when he said, ‘We could call order by the name of God, but it would be an impersonal God. There’s not much personal about the laws of physics’ (Sydney Morning Herald, 27–28 Apr. 2002). Interpreting God as the laws of physics, in particular as the law of negative entropy, seems to destroy the ‘personal’, comforting, spiritual dimension that humans have come to associate with God.

This problem has also been raised by Templeton Prize-winning biologist, Charles Birch. (The prestigious and financially rewarding Templeton Prize is awarded for
“increasing man’s understanding of God” [The Templeton Prize, Vol.3 1988–1992, p.108 of 153]. He and another Templeton Prize-winner, physicist Paul Davies, were the two scientists mentioned in the Science Friction article as committing “scientific heresy” by “dar[ing] to take a holistic approach”, where they are “not afraid of terms such as “purpose” and “meaning””, and by so doing are “cross[ing] the great divide between science and religion”. Birch and Davies, like Hawking, are scientists who have dared to recognise the integrative purpose and meaning to existence—as the titles of some of their books intimate: Birch wrote Nature and God (1965), On Purpose (1990), and Biology and The Riddle of Life (1999); Davies wrote God and the New Physics (1983), The Cosmic Blueprint (1987) and The Mind of God: Science and the Search for Ultimate Meaning (1992). In a 1996 television program titled Talking Heads, in a panel discussion about the concept of God in which both Birch and Davies participated, Birch emphasised that “For most people when you use the word “God” you conjure up a picture of a supernatural, magical magician...[and] the importance of science is that it has been a winnower of...[such] ideas about God that are wrong” (SBS-TV, 28 Jan. 1996). He then went on to raise the issue Hawking alluded to, that even in the holistic, integrative meaning-accepting, order-developing, purposeful, negative entropy-driven interpretation of God, something seems to be missing, that the strictly materialistic, physics-based interpretation appears to be deficient, saying “I have had experiences, and still have experiences, that I don’t think materialism can explain.”

While Birch accepts that the idea of a supernatural, magical God is wrong, he is still concerned that there are dimensions to the concept of God that a law of physics alone does not appear to account for.

What needs to be factored in to clarify this apparent deficiency is the extent of human alienation. Once it is appreciated just how alienated humans have become, as a result of having to live with the horror of the human condition, the dimensions to God, the ‘experiences’ that Birch has had that he does not ‘think materialism can explain’, in fact the whole spiritual aspect of life, suddenly becomes accounted for in the concept of God as the law of negative entropy.

Negative entropy dictates that matter develops larger and more stable wholes. It integrates or orders matter. As has been explained, for a larger whole to develop it is vital that the parts of the whole act unconditionally selflessly. Simply stated, selfishness is disintegrative while selflessness is integrative. As has been explained ‘unconditional selflessness’ is the definition of ‘love’. ‘God’ is the personification of the integrative cooperative, loving, selfless ideals of life. The old Christian word for love was ‘caritas’, which means charity or giving or selflessness (see The Bible, Col. 3:14, 1 Cor. 13:1-13, 10:24; John 15:13) — so ‘God is love’, or unconditional selflessness, or commitment to integration. Mechanistic science has practised denying this truth of the integrative meaning or purpose or direction to life. While the existence of negative entropy, or the Second Path of the Second Law of Thermodynamics as it is sometimes referred, has been acknowledged by mechanistic science, it’s real significance, that of giving rise to an integrative purpose to existence, has been staunchly avoided. Once this avoidance or denial is penetrated and the real significance of negative entropy (as being ‘love’ itself) is admitted then negative entropy is not at all devoid of spirituality.

With regard to mechanistic science avoiding the real significance of negative entropy, Arthur Koestler said: ‘I referred to “the active striving of living matter towards the optimal realization of the planet’s evolutionary potential”. In a similar vein, the veteran biologist and Nobel prize winner Albert Szent-Györgyi proposed to replace “negentropy”, and its negative connotations,
by the positive term *syntropy*, which he defines as an “innate drive in the living matter to perfect itself”. He also called attention to its equivalent on the psychological level as “a drive towards synthesis, towards growth, towards wholeness and self-perfection” ([Janus: A Summing Up, 1978, 223 of 354]). It is precisely negative entropy’s ‘drive towards’ ‘wholeness and self-perfection’ that so unjustly condemned humans and necessitated their reluctance to recognise the real significance of negative entropy in science.

Sir James Darling was quoted earlier saying, ‘The scientist can no more deny or devaluate the truths of spiritual experience than the theologian can neglect the truths of science: and the two truths must be reconcilable, and it must be of importance to each of us that they should be reconciled.’ As Darling points out, it has been in religions that the spiritual dimension to life has been maintained, albeit represented abstractly. For example, the abstract concept of God contained within it a recognition of an all-loving and all-beautiful dimension to life, a dimension that mechanistic science determinedly ignored. ‘Love’ for example is one of the most used words in human life, yet mechanistic science hasn’t even had a definition for it.

Mechanistic science is just one expression of the alienation in the world, the estrangement from all the truth and beauty that really exists. It was explained in the *Resignation* essay that if people were not resigned and alienated they would have the kind of capabilities and sensitivities that savants have. This comparison gives the resigned, denial-maintaining, alienated world an accurate measure of just how spiritually bereft its world really is. The *Macquarie Dictionary* (3rd edn, 1998) defines ‘spirit’ as ‘the vital principle in humans, animating the body or mediating between body and soul’, so our ‘spirit’ is really our aliveness, our sensitivity to all of existence, and it is this capacity to be super-aware that largely died with resignation. Humans have had to live in a dark cave of denial; they have had to block out all the sunlight in the world, all the truth and beauty that our soul knows because of the soul’s unjust criticism of the intellect. Mechanistic science had to comply with that strategy of denial.

I have known Charles Birch since I was a student in biology at Sydney University and I know of his great love of animals. I know that Charles has extraordinary empathy for his cats for example, and that that sensitivity extends beyond what conventional science is able to account for. Mechanistic science is alienated science, it is science that complies with the tragic and costly resigned strategy of denial of all things related to the all-sensitive world of our soul.

When humans resigned there were so many truths and aspects of the world that they had to block out from their mind, live in denial of. However, in order that their world would not be completely devoid of truth, meaning and beauty, what resigned humans did was gradually allow the deeper confronting truths to be acknowledged in relatively non-confronting abstract, mystical, metaphysical descriptions—in such terms as ‘God’, ‘soul’, ‘spirit’, ‘prophet’, ‘sin’, ‘heaven’ and ‘hell’. Comfortable with all the deeper truths—in fact, with the whole ‘spirituality’ of life—described only in non-confronting abstract, mystical terms, it is a shock to have the arrangement breached. The gulf that now exists between what we have been able to acknowledge in scientific terms and the deeper truths that we have allowed through our defences using abstract description in religion, is immense. The so-called ‘spiritual world’ seems like another universe to resigned, alienated humans, but it is not.

For example humans are now able to actually understand, in first principle scientific terms, that God is love. This rational insight does not destroy the spirituality that humans
have come to associate with God, rather it brings immense confirmation and reinforcement of that truth. Similarly monotheism, the existence of one great overriding, all-pervading God, can now be clearly and rationally understood as the law of negative entropy. In particular, understanding the human condition, namely how the development of order of matter led to humans’ corrupted, divisive condition, explains how and why ‘God’ created the suffering in the world. It also explains how that suffering can at last be brought to an end. The relieving and reinforcing demystifications go on and on. It can be seen that the world becomes far more meaningful than it was before explanation. While humans could not understand and confront God, their world was for the most part a meaningless empty place—a dark cave-like existence as Plato described it. That hollow, empty, dark existence has gone.

During my 30s and 40s, when I became increasingly immersed in the task of explaining the human condition, my mother often commented that this world of explanation that I was becoming so preoccupied with seemed to her to have lost all the enthrallment, beauty and magic that my world had been full of in my youth. In truth the ability to understand the world of humans liberates our mind and allows it to at last truly access all the beauty and magic in the world.

The demystification of our world doesn’t mean the specialness of our world is removed, rather it means the specialness is made more tangible. Mechanistic science, like all forms of denial, has largely been a process of stripping the beauty and truth from the world whereas the denial-free explanation of the world restores all that beauty and truth. It allows humans to live with a full awareness of, and ability to savour, the beauty of integration. It is alienation that is devoid of spirituality, not the truth.

Humans’ deep reverence for God as a deity is a direct measure of, and counter response to, the frailty of human life under the duress of the human condition. With understanding of our world all the beauty and truth that really exists out there at last becomes fully accessible. As Tim Macartney-Snape described it in his Foreword to Beyond, ‘It is like having mist lift from country you’ve never seen in clear weather’ (p.18 of 203).

If negative entropy ends with the ‘heat death’ or ‘big crunch’ end of the universe, where does that leave God?

The third concern that enters people’s minds when it is suggested that God is the law of negative entropy is what happens to God when the universe comes to an end, as physicists say it will, either through expanding until eventually the stars burn out—the so-called ‘heat death’ of the universe—or alternatively, the eventual contraction of the universe until the so-called ‘big crunch’ occurs in which everything is obliterated, including time. Does God come to an end when the universe comes to an end? Does this mean that God’s omnipotent (all-powerful), omnipresent (all-present), omniscient (all-knowing) qualities are not eternal?

While Charles Birch has acknowledged that ‘a deeper religion no longer envisions God as omnipotent creator outside a mechanical universe’ (Templeton Prize acceptance speech, 1990), he is troubled by the possibility of God ending with the end of the universe. In the aforementioned Talking Heads program, physicist Paul Davies pointed to the eventual destruction of our universe many trillions of years in the future, either through ‘heat death’ or ‘big crunch’, after which Birch asked Davies: ‘But does everything come to an end? I mean, the physical universe will come to an end in what you are saying [but] is anything saved in the
system?…The notion of God really collapses if God also collapses with the physical universe. Is there anything which is saved in the notion of God after the big crunch or whatever is going to happen at the end?…You talk of there being meaning and purpose and if you then think that at some stage the whole physical thing is going to collapse, where is the meaning and purpose then?…It only has meaning so long as it physically lasts and I think religions are very concerned about the possibility of there being something which goes beyond the physical state of the universe.’

Davies’ response emphasised the limitation of viewing our universe from within it, saying: ‘We come back to the question of time. The physicists are very comfortable thinking of the whole of time as laid out all at once—the timescape. There may be a bottom edge—the beginning, the big bang—and a top edge—the end, the big crunch—but the whole thing is just there. There is a directionality to it, but you can stand outside of this spacetimescape as a whole and that can be something with meaning. There is nothing to say that it has to go on forever, that you can have a bottom edge but no top edge.’

As has been mentioned, physicist Stephen Hawking said ‘I would use the term God as the embodiment of the laws of physics.’ The point is God is not only the law of negative entropy, but all of the laws of physics. In fact as Davies says, ‘you can stand outside of the spacetimescape as a whole and that can be something with meaning.’ The whole phenomenon of the existence of the universe, and even its potential demise, is meaningful.

Humans made the negative entropy-driven integrative meaning of existence ‘God’ because, of all the laws of physics, that was the one that deeply troubled humans, the one humans have been so at odds with.

Integrative meaning was the one truth that humans lived in mortal fear of. It stood over humans as an awesome presence. It was as God in the immensity of its significance. Humans ‘wrestled’ with ‘God’, with the issue of their apparent inconsistency with the cooperative, integrative meaning of life. ‘God’ condemned humans but in their deeper selves humans have always known that while they appeared to be at odds with ‘God’ there was a greater truth—that they one day hoped to find, and now have—that would explain that they were not in fact unGodly beings, that they were part of God’s plan after all, that there was a biological purpose to their divisive behaviour. Humans were able to give expression to this belief that they weren’t unGodly beings by recognising that while ‘God’ was something fearful, ‘He’ was also something loving and compassionate. ‘God’ was a frightening entity in people’s lives, but ‘He’ was also immensely comforting, forgiving and redeeming. Because of the insecurity that resulted from the dilemma of the human condition humans have derived immense comfort from being able to associate with the idea of an all-powerful, all-present, all-knowing, overseeing, loving God. It can be seen that the whole dilemma of the human condition was intimately tied to the concept of ‘God’.

The point is that the issue of ‘God’ for humans has really been the issue of the human condition; clarify and resolve the human condition and the whole issue of ‘God’ becomes redundant. The overseeing, fearsome, awesome, and at the same time, comforting, loving and forgiving concept of God, ends. The whole situation for humans changes.

Once free of the agony of the human condition humans will view themselves as part of a universe that is influenced by various forces and subject to various laws, each of which has to be lived with, however humans won’t be condemned and oppressed by any particular force or law, as they have been for 2 million years by negative entropy.