## BY COMPUTER AND SPACECRAFT TO GOD AND ETERNITY

## Essay-review by John Wren-Lewis

The Physics of Immortality: Modern Cosmology, God and the Resurrection of the Dead by Frank Tipler. Macmillan, 1994, \$39.95

If you want to know what a real "new paradigm" scientific worldview might look like, as contrasted with the old-hat pseudo-scientific worldviews which often currently sail under the "new paradigm" flag, read this book by the professor of physics at Tulane University in New Orleans.

I don't mean read it as something to be believed - nothing scientific ever asks that. Only time and experiment can show whether Tipler's specific ideas are viable or not, as he himself continually insists (offering a 120-page Appendix for Scientists, with the equations they would have to examine and test.) I mean read it to have your horizons expanded and some old-age prejudices blown apart, particularly prejudices about the supposedly necessary oppositions between materialism versus spirit, technology versus "small is beautiful," economic rationality versus social altruism, progress versus the here-and-now, and perhaps most important of all, reductionism versus holism. Where most contemporary spiritual, ecological and New Age thinkers start out by deploring scientific reductionism and end up calling for loyalty to Planet Earth, Tipler takes the reductionist bull by the horns and rides it all the way to the heaven of eternal life, in which infinite love has "put all things under Its feet."

He makes this intention clear right from his very first paragraph, which should win some kind of prize for *chutzpah*, even if he doesn't get the Nobel Prize (as he well might) for his co-authorship, with Britain's John Barrow, of the so-called Strong Anthropic Principle in relativistic cosmology. Having recently spent months struggling to find an arresting opening for my own book (I think with some success), this one leaves mine for dead:

"This book is a description of the Omega Point Theory, which is a *testable* physical theory for an omnipresent, omniscient and omnipotent God who will... resurrect every single one of us to live forever in an abode which is in all essentials the Judeo-Christian Heaven...I shall make no appeal, anywhere, to revelation. I shall appeal only to the solid results of modern physical science... I shall show *exactly* how physics will permit the resurrection to eternal life of everyone who has ever lived, is living, or will live. I shall show *exactly* why this power to resurrect, which modern physics allows *will in fact be used*." (The italics are mine, but Tipler is completely serious about all these claims, and gives detailed calculations to back them up.)

Yet he's not trying to square science with any prior Christian belief, for he himself is not a Christian. He gives cogent reasons towards the end of the book why he can't personally accept formal Christianity, boiling down to the fact that it's too exclusive to encompass the sheer generosity, power and wonder of the Omega-Point Theory. Rather, he draws on top scholarly authorities on African and native American shamanism, Hinduism, Taoism, Buddhism, Judaism,

Christianity and Islam, to argue that all these religions are humanity's pre-scientific intuitions of a potential in the *physical* universe which science is at long last beginning to recognize - namely, the potential for eternal conscious life, ie., conscious life not subject to "the thousand natural shocks the flesh is heir to" in organic life as it has so far evolved on Planet Earth. He takes his term 'Omega Point" from Teilhard de Chardin, but considers Teilhard's attempts to reconcile Christianity with evolutionary science flawed, by the fact that Teilhard's mid-twentieth-century science was a very primitive affair in the light of subsequent advances.

And here, speaking as a former scientist and a born-again mystic (since my near-death experience in 1983), I would say that both the weakness and the strength of Tipler's book is that he takes no account - indeed seems largely unaware - of the fact that mystics all down the ages in all religions (of whom Teilhard was one) have actually experienced a timeless "dimension" of aliveness in and through the transience of organic human life, and have thereby been able to experience that transience without suffering. But I think the strength outweighs the weakness as far as the book's value is concerned, because my own extensive studies since getting reborn into eternity-consciousness have led me to the conclusion that about 99% of what is taught about mysticism is pie-in-the-sky fantasy, which does more injustice than justice to what mystical consciousness is really about.

Why? Because the whole structure of the human mind is 'incarnational," ie., oriented to expressing eternity in finite or space-time terms - so unless you are by some 'act of grace" already experiencing eternity-consciousness, your ideas about it are likely to be more false than true. Probably the only way to get any remotely realistic imagination of it (as distinct from escapist fantasy) is to start by thinking seriously what the universe would look like if finite consciousness could survive *physically* without being subject to the organic limitations of decay and death. This, as Tipler points out, was what the ancient religious ideas of 'spiritual bodies' were trying to do, but they were only vague imaginings, because humanity's notions of the real potentialities of matter were then so limited.

For the same reason, purely philosophical arguments purporting to show that consciousness includes matter rather than the reverse, from Plato and Nagarjuna to Hegel, Aurobindo and Teilhard, never really carry existential conviction (and therefore never really convince sceptics), because in current practical experience matter is quite obviously so much bigger and more powerful than consciousness as we experience it. The strength of Tipler's book is that it shows how really modern science brings these ideas down from the realm of vague imagination to possibilities of practical realisation - so even if he's wrong in his specifics, he takes a major step forward in giving "a local habitation and a name" to what otherwise risk being "airy nothings."

Well, not exactly local in the ordinary sense, nor in the sense in which our contemporary ecologists want us to recover the sense of locality on Planet Earth. Yes, we are children of the earth along the line of time past, and technologies which render the planet unfit for human habitation must surely be curbed, yet there is something in the human soul which knows it is not just 'of the earth, earthy," and philosophies which deny that impulse do so at a psychological and spiritual peril every bit as great as the dangers of fouling our current ecological nest. And this is where Tipler, the self-styled unrepentant reductionist, speaks like a true mystic who knows there is more to matter than evolution has yet uncovered - but true to his scientific brief, he makes no appeal to magic or the supernatural. He appeals to what science and technology are already uncovering right here in our present earthly backyard about the potential of matter to support

intelligence in non-organic forms, in machines such as the one on which I'm writing this review right now.

Flesh and blood, said St.Paul, cannot inherit the kingdom of God - and it's pretty unlikely, even with the greatest possible advances in space-travel, that they'll ever inherit much beyond our own solar system. But Tipler (who goes well beyond PhD level in Computer Complexity Theory) gives ground for thinking that well before the end of the next century, we shall have been able to transfer our whole minds with the full sensuous enjoyment-capacity and feeling-capacity of our biological inheritance inside self-replicating nanotechnological computers weighing no more than 100 grams each - and since they need experience no time-lapse while travelling, colonising the entire galaxy with (or rather as) them will be a piece of cake. With that much ecological space to play with (to say nothing of the fact that the energy requirements of individual personal existence in that form are minimal), there is no question of scarcity, which Tipler argues (again drawing on some pretty formidable authorities) is the root of all so-called evil impulses. So those sci-fi-fantasies about technologically advanced civilisations breeding inhuman Daleks, or of Dallas-style soap-operas being carried on interstellarly, are just that - fantasies based on our as-yet-limited experience of finite consciousness.

Colonizing the rest of the universe will take a little longer - several million million years, in fact - but Tipler argues that because the most basic of all life-drives at the root of consciousness is survival, colonization will surely happen, well before the point where the expansion of the universe goes into reverse towards the 'big cr unch." And at that stage, the vastly expanded collective intelligence of the colonised universe - the Omega-consciousness -will have at Its disposal the unimaginable energy of gravity-shear, which will give It the power to stop the contraction and create a stable cosmic paradise of truly eternal finite life. I was reminded at this point of a science-fiction story I once read about a day in some undefined future when a vast number of planetary supercomputers are linked up across the galaxy; when the resultant supersupercomputer is asked humanity's age -old question, 'Is there a God?', the reply comes back, 'Yes there is - now!'

In the story this answer was clearly meant to have highly ambiguous, indeed quite sinister, overtones, but Tipler argues that these too reflect only our present very limited view of consciousness. He establishes, by appeal to game-theory, that Omega-consciousness must of Its very nature be utterly generous towards every sentient life-form that has contributed to Its own vast evolutionary struggle - so It will have both the power *and the imperative* to resurrect all who have ever lived, good and bad alike, into It's own blissful time-transcendence. And in that condition, there will be absolutely no problems of overcrowding or denial of space for individuality, nor any pressure on time for doing whatever each one wants to do - and therefore neither unfreedom nor boredom.

Moreover if any readers feel this is all too far off (squillions of millennia) to be real, he argues that this too is simply lack of imagination based on our present limited experience, for we shan't have been 'hanging around "in any limbo during the interim. When Tipler talks of resurrection, he *means* resurrection, not immortality - which once again jibes completely with my own mystical experience. When I experienced 'time-stop" in Thailand in 1983, I most emphatically had no experience of an immaterial soul existing apart from my body, but rather of a literal rebirth or resurrection - that is, of 'Omega's" John Wren -Lewising starting up entirely afresh, with all its former memories, when the body was resuscitated before brain-decay set in.

For the ultimate resurrection, Tipler argues in great detail that personal identity can be exactly reconstructed by progressive 'unpacking" of memory-data back through history, using advanced versions of techniques already known in computer theory for 'fleshing out" imperfectly recalled data - a deliberate employment of the processes that already happen when genes produce bodies and brains produce the memories that make up "experience."

In the book's concluding chapters, Tipler actually shows how his theory might be compatible with mysticism, though I don't think that was his intention. At several points he remarks how in modern physical cosmology, the Omega-state can validly be said to 'feach back through time" to influence events leading up to its own evolution, and though he doesn't use the term, I was reminded of the 'strange attractor" idea in Chaos Theory. This could indeed be one way of understanding the 'beyond that is within" or *everpresent* Omega experienced by mystics. (As a gesture to Christians, Tipler suggests there's no logical reason why Omega shouldn't have resurrected Jesus from the dead, but he also can't see why, if It did, It stopped there - so he prefers to explain the Easter appearances as just Visions.)

At first sight, it's something of a puzzle that this book hasn't gone off like a bomb in spiritual and religious circles, considering the popularity of other books linking modern science with spiritual issues, like Capra's *The Tao of Physics*. True, there are many points where Tipler overestimates the general reader's capacity for grasping even simple ideas in relativistic cosmology; even I, who did the subject for my degree, am still quite unable to say whether his assertions about the Bekenstein Bound or the Higgs Boson make sense or not. But that kind of difficulty applied equally to Capra's book, and even more to Stephen Hawking's *A Brief History of Time*, which had a far more negative conclusion than Tipler's, yet became a bestseller. So why is Tipler's book still only trickling off the shelves?

I think he puts his finger on the answer in the very last sentence of his main text, when he asserts that 'Religion is now a part of science." This is implied by his whole argument, and I think he just doesn't realise that the psychological effect is to leave the great majority of people feeling 'left out," because it means there's no *significant* contribution they can make to humanity's 'salvation'. Since being born again as a mystic, I've come to recognise that the urge for personal significance is as fundamental to human consciousness as the urge for survival, and not to be dismissed as mere "ego". So I can quite see that it's not just clergy who might be less than wildly enthusiastic about Tipler's book because it could make them redundant; he may not intend his Omega Point to seem too distant from our lives to matter, but that's how it comes across if the evolution leading up to it from here on out is mainly a matter of high science and technology.

But do read it, all the same, for even if his peers eventually declare his conclusions doubtful or invalid, it's still very important indeed in showing how even the most reductionist science today implies the spiritual perspective. And it should force us all to think again about whether current 'green' attempts to curb scientific/technological advances in the name of love for Planet Earth may not in fact be theologically shortsighted underestimates of humanity's spiritual destiny, which according to both St. Paul and Tipler may be the only means whereby our undeniably spectacular home planet, necessarily perishable in the long term on current world-views (and maybe the not-so-long term, if that wandering asteroid hits), could be resurrected to share God's eternity. Amidst the current timely outbreak of eco-prophecy, Tipler has given us an equally timely reminder of another (and surely more basic) aspect of the religious story, a statement which simple conservatives like the Pope or Billy Graham are just not equipped to make.

John Wren-Lewis's book <u>The 9.15 to Nirvana</u> will hopefully be published in 2001.