

DARWIN PLUS!

EVOLUTION, SCIENCE, RELIGION AND THE PARANORMAL

A RECONCILIATION

Chas Griffin

Free Sample Chapters 1-7

DarwinPlus!

Evolution, Science, Religion and the Paranormal

(A Reconciliation)

... and about time too.

Nullius in verba
(Take nobody's word for it)
Motto of the Royal Society

Test everything
Saint Paul in Thessalonians 5:21

*Believe nothing, no matter where you read it, or who said it, no matter if I
have said it, unless it agrees with your own reason and your own
common sense*
Buddha



Why This Book?

Are you puzzled by why Big Science seems to ignore even well-documented paranormal events?

And why so many Big Scientists are so scathing on the subject?

And why Big Religion is no help either?

And are you also puzzled by the Science/Religion schism, when neither side seems to be able to come up with completely convincing arguments for their case, and every 'discussion' ends up leaving you just as puzzled or uneasy as ever, but not sure why?

We can do better than that....

**Things either happen or they do not happen.
If something does happen.. then there is a *cause* for it.
There is logic in there SOMEWHERE.**

Let's find that logical path.

And once we've found it, who knows where it might lead.....

Thanks to...

Mainly my wife, Anne, for listening to me droning on about this book for over twenty years. Such patience....

Also to John Sheffield, Doug Taylor, Dr James Le Fanu, Emily Swanson, Mark Stanton, Adam Russell, Dr Phil Sanders, Tom of the *SPR*, the *ASPR*, Nick Cumber, Sonu Bhaskar, Ian Bradley, Malcolm Whyman, Professor Hilary Downes, Sarah Day, Guy Lyon Playfair, Tricia Bloomfield, Nevil Hutchinson, Stephen McLaren, Scott Pack, Ruth Jeavons, Dr Steuard Jensen, Dr Mike Crossley and Mark Edmunds.. for their input, and help with reading drafts. Special thanks to Caitlin Russell for the graphics on pages 329 and 378, and for going along with my brutalist design for the cover, rather against her better judgement.

Thanks too to *Google* and *Wikipedia* for making the previously endless job of checking dates and spellings so much more enjoyable.

Also to all the good people who have made various diagrams and pictures available on the www. I acknowledge their skills and generosity here. If someone would like a specific mention, please contact me. I cannot afford to pay a fee, I regret, but shall be very glad to offer a personal thankyou and a free copy of this ebook.

If you feel you would like to reproduce a passage from *DarwinPlus!* please feel free to do so, but I would greatly appreciate it if you could acknowledge the source, and let me know where the extract will be used. I'm keen to know who is reading what, as you will no doubt understand. Many thanks.

For any directly commercial re-use, please contact me at
www.thirdleafbooks.co.uk

Finally, but by no means least, thanks to Charles Darwin and Richard Dawkins, for getting me thinking, and to the authors of all the other inspiring and interesting books I read in the course of preparing this one.

A caution:

I include a number of internet hyperlinks in this text, but I'm afraid I cannot guarantee that they will all be up and running when and if you choose to use them. Paper still has its place, I guess!

Contents

Part One **Problem? What problem?**

Intro	
Chapter 1	Spooks or No Spooks?
Chapter 2	Darwin's 'Creator'
Chapter 3	Some Puzzling Logic...
Chapter 4	Why Materialism?
Chapter 5	A Positive Alternative...
Chapter 6	So Where's the Evidence?
Chapter 7	DNA is Served

Part Two ***So that's the problem! Now what?***

Chapter 8	All in the Mind
Chapter 9	Philosophy, or er....
Chapter 10	A Brief History of Materialism
Chapter 11	The Tale of the Kale

Chapter 12	Religion
Chapter 13	Yoga
Chapter 14	Exo and Eso
Chapter 15	Dreams and Hypnosis
Chapter 16	Vibes and Intuition
Chapter 17	The Occult
Chapter 18	The Occult: a Little More
Chapter 19	Mind and Brain
Chapter 20	The Paranormal

Part Three

A Solution?

Chapter 21a	A Great Surprise (DarwinPlus!)
Chapter 21b	Another Great Surprise...
Chapter 21c	And Another ...
Chapter 22	<i>No</i> Great Surprise...
Chapter 23	Time, etc
Chapter 24	A Paradigm Fit for Burning
Chapter 25	Movement

Part Four

It all Seems to Fit....

Chapter 26	Other Implications of DarwinPlus: (i) Religion (ii) Philosophy etc
Chapter 27	The Price We're Paying..
Chapter 28	So Who's to Blame?
Chapter 29	A Few Conclusions
Chapter 30	At Last!

A Word to the Reader

How to get the best out of this book....

The text is in two formats. The normal one, like this, and passages in a smaller font, tinted in a restful shade of blue.

§ Like this.

The normal font sets out the main points I want to make. The smaller font passages mainly just add extra examples or matters arising, or an occasional joke. In other words, you don't need to read the smaller font in order to read the book.

I suggest that you read the normal passages straight through, and if you find the a particular theme of special interest, then it might be worth re-reading, adding the smaller font passages as you go.

Or you can pick and mix. Or decide against the whole thing and go to the seaside instead. I wish you a lovely day, whatever.

Oh.. and I hope you don't mind me addressing you directly as 'dear reader' from time to time. I find it helps me to concentrate.

CG

Newcastle Emlyn

West Wales

June 2011

Part One

Problem? What problem?

This section discovers that there is a profound problem at the very foundation of what science accepts as a sound base to build upon.

Introduction

Facts do not cease to exist because they are ignored

Aldous Huxley

Are Science and Religion compatible? Yes, they are, despite all the slings and arrows the defenders of each respective faith throw at each other.

§ 'Faith'? Science is a 'faith'? As a method of investigation, no it is not. But there is one extremely powerful element in current science which most definitely *is* an act of faith, and no good has come of it; and I don't mean 'evolution'. Any ideas? If not, this book is definitely for you....

What makes me so confident? Because my only belief is in logic, and logic leads straight to this conclusion. I can hear your gasp from here, but it's true.

So why has nobody else worked this out? I've no idea. It's not exactly rocket surgery. Perhaps thousands *have* worked it out but have not thought to mention it to the rest of us.

Or maybe we've just not been listening?

Or maybe it's because of a near-universal human problem I've 'discovered' in my own search for some sort of logical understanding of What It's All About, and that somehow, in far too many places, logic has got forgotten.

I will explain all as the book progresses, I hope, though it might be a bumpy journey for some: especially anyone with a firm conviction that they already have a firm grasp of 'the truth', thankyou very much. All I ask of you, dear reader, is that you put all convictions on hold for the duration, and simply work with the requirements of logic. No harm will come of this, I promise. In fact, I will be surprised if it does not untangle a couple of knots in your present philosophy. It has untangled a fair number for me.

As everybody's life is a journey of shifting and expanding horizons, I've chosen to write in terms of my own mental journey, which I suspect a lot of people will find familiar, at least in part. My journey followed a definite path, from a childhood interest in ghosts and suchlike, to an understanding of why science didn't share my interest in spooks, and then on to an understanding of why science at one point even refused to acknowledge the existence of 'Mind' itself. Many other puzzles of a similar sort raised their heads. Then one day I realised what all these puzzles had in common, and what the underlying problem was. Step One.

Religion, meanwhile, had been a constant bewilderment to me. I'd spent 500 enforced hours in the school chapel and had come out none the wiser, and positively resentful. How could clapped-out myths and gobbledegook possibly have any relevance to anything?

But the more I read and the more I thought outside the box, particularly after completing Step One, the more I could tease out from beneath the surface of tired old 'religion'. Step Two.

Eventually, and much to my surprise, it became clear to me that both science and religion have much more in common than they realise. And not necessarily in a good way. Step Three.

After worrying at this for many months, I suddenly realised that it would take the briefest of intellectual steps to rationally reconnect religion with science. So why hadn't it already been done and been seen to have been done? Again, I've no idea.

Actually.. after some twenty years of reading and thinking, and thinking again... I think I now *do* have an idea why. Step Four.

Now comes the tricky bit, of writing it all down in a way that makes my train of thought clear to you, dear reader, so you can judge for yourself. Step Five.

The final link in the chain, that of *logically* analysing all my points and suggestions, without dragging in any favourite old *beliefs* you've been taught to hang on to, is down to you. I wish you joy!

Please do check that my logic really is logic, but don't make assumptions about what hidden agenda I have. I don't have one, honestly. Logic is my only guide.

And please don't assume that if I say x , that I must therefore mean y and z as well. I don't. I mean only x . If I do mean y or z as well, I will say so.

§ I've done my best to check everything that is presented as fact, but clearly my claims can only be as correct as my sources of information. There will be sure to be some errors of fact, for which I apologise, and areas of debated 'fact'; but none serious, I believe. I think the logic will remain, whatever. You will be the judge.

It took literally years trying to work out how to present this book, and where to start it. I was originally going to write it as an academic investigation, but eventually rejected that route in favour of the 'personal journey'. After all, it had been a dramatic personal journey for me, and I thought it might be more interesting as a journey for you too.

The book is cross-disciplinary in nature, and I am aware of the fact that I sometimes deal with issues too briefly. Part of me aches to fill out the details, or deal with 'objections' and counter-objections, but space is limited, and some sort of shape has to be maintained.

I've also done my best to reassure the careful and critical reader that I will be returning to an unfinished point later in the book, by adding 'More later' here and there. 'Far too often' many will say. Sorry... but the intention is to reassure not irritate.

If you know for a fact that some of my own quoted 'facts' are simply and *absolutely* wrong, please do contact me via my website (www.thirdleafbooks.co.uk) and give me adequate solid (and comprehensible: ie, not too technical) references so I can check your versions against mine. Thanks very much.

I also make occasional judgements concerning historical movements and events, which I believe to be tenable. But if I am *very* wrong in a particular judgement, again, I would love to hear from you. But only if '*very* wrong', please!

And if you can think of a way I can make a point more clearly, then that would be valuable to me as well. Thanks.

Much as I would like to, I'm afraid pressure of time won't allow me to indulge in debate about anything in the book. I've said all I have to say within the present pages. You will make your own judgement on the issues, hopefully after carefully re-reading them and then discussing them at great length with many friends.

Chapter 1

Spooks or No Spooks?

... that is the question.

There is no expedient to which a man will not resort to avoid the real labour of thinking
Sir Joshua Reynolds

Even the longest journey, the Chinese say, begins with the first step.

So maybe it would make sense to start this journey with my first glimmering of intellectual frustration, although I was too young at the time to think in such terms.

When I was thirteen or so, Dad used to read *The Daily Telegraph* and on Sunday, *The Observer*. All very boring. But my Auntie Ida, who lived over the river, in Toxteth, used to buy the much more interesting *Tit-Bits* and *Reveille*. Every now and then, these chatty little mags would find space among the pin-up girls and horoscopes for stories like '*Lady in Red Crinoline Startles Courting Couple*', or '*Plates Flew Round the Room, Says Vicar*'. I read them in the same sense that I would read anything else, and was vaguely puzzled by two things: firstly, why hadn't Science (I was a great fan of science, as was Dad) put a stop to all this nonsense, if it *was* nonsense? And secondly... surely it must *be* nonsense, mustn't it?

After all, a visitation from some sort of parallel reality, crinolined or not, is a very big deal, wouldn't you say, especially to science? And how can plates fly round a room of their own volition, as witnessed by a respectable vicar? Even aged thirteen or so, I knew Big Stuff when I saw it. So why did *The Observer* not send in a hit squad of top investigators? 'All nonsense', presumably.

§ Throughout this book you will find some unusual uses of initial capitals. For example, I will sometimes refer to 'science' and at other times to 'Science'. I use the former when referring to 'science' as a discipline, or method, or pursuit, as in: '... Man's pursuit of science has been a story of gradual accumulation, punctuated by moments of insight...'. I use the latter when referring to the broad consensus of opinion of the scientific community, as in: '...we are assured by Science that there is no purpose in or to the universe..' Clearly, this is not meant to mean that every single scientist holds this view or any other that I make in generality.

I use 'religion' and 'Religion' similarly.

Occasionally I will capitalise other words and phrases in order to make similar distinctions. I hope these uses aid clarity, as they are intended to.

Once in a while I'm not sure whether to use a capital or not. Nothing's easy, is it?

If in doubt, I don't capitalise. I hope nothing is lost by this.

The trouble with it all being nonsense was twofold for me. First of all, I knew that ghosts and poltergeists had been known and reported from every society I'd ever heard of, and for hundreds of years. Were *all* these people fools or liars?

And more importantly, I knew two people, both perfectly sensible adults, who had bought a pub in Shropshire, who told me about a ghost they regularly saw passing outside the kitchen window and then walking through a wall and disappearing. They had tried several times to speak to this hunched-up old lady in black but she paid them no attention, and continued to walk into and apparently *through* the same solid brick wall as if it simply wasn't there. These were sane and rational people, and good observers (he had been a Battle of Britain pilot). And no, they did not 'drink'. And no, they were not teasing me. Kids are good at spotting that sort of thing. Well I was, anyway.

Back home, I mentioned this old lady ghost to a couple of friends, who, predictably, took the mickey. At school I made a tangential mention of it to our biology teacher, who was more directly scathing.

Why was everyone so negative, I wondered? And so *emotionally* abusive? Why did nobody seem to think, as I did, that this was a profound mystery that needed looking into in a spirit of calm and proper scientific enquiry?

I read a couple of books from the library and became convinced that there really was a great mystery here. There were dozens of reports, well-attested by reliable people, of strange sightings in numerous English castles, pubs and airfields. Hampton Court and the Drury Lane theatre are consistently reported as being haunted. So why did there seem to be some sort of global conspiracy of denial? After all, it could not be a question of 'belief', even though the common question chucked at me was 'You don't believe in ghosts, do you?' Surely, it was a matter of *fact*, one way or the other? Either ghosts *did* exist, or they did *not*. Belief didn't come into it. So why the wall of silence; and why the derision?

Adolescence soon posed other and more immediate problems for me

§ [Girls and exams, since you ask; edited details upon application.](#)

and I let the questions fade into the background. It was clear to me that the science teachers and the school chaplains had nothing to say to each other, and seemed not to be interested in debating their differences for the benefit of the students, either. Each party was happily marooned on its own little island. I only once dared to raise my own perplexity at this and was repaid with scorn by the science teacher, and waffle by the priest. I gave up. Sarcasm and dogma had beaten me.

After turning down an offer to train as a nuclear engineer, I squeaked into university and squeaked out again with a modest degree in Slavonic Studies. The course did not greatly engage me, and I was always more than a little bothered by 'What is the point of all this? Why do I or any other sane person need to study the philology of Proto-Indo-European, as possibly spoken several centuries BCE, or even the relatively spanking new Old Church Slavonic?'

§ For example:

Declension of *wĺk ^w os	Singular	Dual	Plural
Nominative	*wĺk ^w os	*wĺk ^w oh ₁	*wĺk ^w oes
Vocative	*wĺk ^w e	*wĺk ^w oh ₁	*wĺk ^w oes
Accusative	*wĺk ^w om	*wĺk ^w oh ₁	*wĺk ^w ons
Instrumental	*wĺk ^w oh ₁	?	*wĺk ^w ōys
Dative	*wĺk ^w oey	?	*wĺk ^w o(y)mos
Ablative	*wĺk ^w ead	?	*wĺk ^w o(y)mos
Genitive	*wĺk ^w osyo	?	*wĺk ^w ooHom
Locative	*wĺk ^w ey	?	*wĺk ^w oysu

You will note that in this fully-inflected declension of the Proto-Indo-European word for 'wolf', that the singular instrumental case is identical to the dual vocative. Fun, eh? Actually, something that has always bothered me about language is how such complications as declensions and conjugations ever arose in the first place. It seems to go completely against the run of how people generally treat language: ie, to constantly seek to simplify it. For example, English has gradually shaken off almost all its old conjugations like 'thou goest' and so on, along with vocatives and instrumentals and so forth. So how did it ever come about that the more primitive the society the more complex the language? Any ideas? More on language as we progress. It's very relevant to the book.

Just as a matter of interest, the instrumental case is used to express 'by means of', as in 'He severed his opponent's head with ('by means of') a wolf'. Neat.

The vocative is used when addressing an entity directly, as in this dual case of 'O both wolves...'

Some cultures and languages are on a hiding to nothing it seems to me.

But I did enjoy my time at university, and met my future wife there, so I had no complaints at all, apart from a vague feeling that there must be something else to life than learning more and more about less and less, which is what academia seemed to be about.

Significantly, to me at least, the most powerful memories I have of those three years are of a couple of paranormal experiences.

Should we call 'hypnosis' paranormal? I do, but if you don't, that's OK. It doesn't matter.

§ *Paranormal*: Beyond the range of normal experience or current scientific explanation.

The facts are 1) that hypnosis is known to work, but 2) nobody knows how, or perhaps more interestingly, 'why' (which is why I classify it as 'paranormal').

§ 'How?' and 'Why?'...the great divide. Science claims that it is not concerned with the 'Why?' of things, merely the 'How?'. This is because current Science thinks there is no 'Why?' to be answered. It's all chance. More later.

I had joined the university's Society for Psychical Research and went along to an open demonstration of hypnosis one evening, conducted by a man whose name I've unfortunately forgotten. He was of mature years, and was a practising surgeon, who used hypnosis as part of his patient recovery system. He told his audience of a hundred or so of how he had hypnotically removed all the pain from an airman who had lost a leg crash-landing a damaged Lancaster bomber during the war. The next time he visited the patient he asked how the leg was feeling. 'Fine,' said the airman, and to prove his point he punched his stump. This started the bleeding again. "The "moral" of this", the surgeon said 'is that I now never take away *all* the pain. Just 'enough'.'

This intrigued me very powerfully: *that the Mind, and somebody else's Mind at that, could control pain partially or absolutely, at will...*

§ *More on Mind and Matter in Chapters 20 and 23.*

The other powerful memory is of a couple of months I spent with a few friends exploring the Ouija phenomenon,



until it scared me witless and I (a firm sceptic of both religion and, until very recently, the Ouija phenomenon) spent the night with my postcard of El Greco's *Crucifixion* on my bedside chair, close to my head, too frightened to go to sleep.

§ More on the Ouija business in Chapter 18.

I had no idea what to do with my life and drifted into the family trade of teaching, in a comprehensive school in the Black Country. You didn't need a teaching qualification in those days, so most of my time was spent learning how to teach. I thoroughly enjoyed it, and remember being impressed with the openness of the kids' minds. They asked questions, which was refreshing. They weren't all that interested in Old Church Slavonic either, which was also refreshing.

I joined the national Society for Psychical Research, following my experiences at university, and eventually carried out a mass testing of the whole school for latent clairvoyance, using a pack of Zener cards, in conjunction with Professor Beloff of Edinburgh University.

§ A pack of Zener cards contains five each of the following cards:



The odds on guessing a particular symbol correctly are a neat one in five. You can have a lot of fun with a home-made pack.

The results were... inconclusive, as they always seemed to be in this area of investigation. Nonetheless, there were occasional flickers that continued to intrigue me and lead me on. My personal Ouija experiences had convinced me absolutely that there were secrets to be discovered here, but yet again, I was bewildered by the lack of interest most people showed in any of this stuff. Could nobody else see the potential that lurked behind it? The implications?

Then came the 1970's, domesticity, and parenthood, and little time or inclination for following up on life's mysteries. I still found religion incomprehensible, especially as each sect seemed to hate its rivals even more than other religions, or indeed outright atheists.

§ This was a powerful trait amongst early immigrants to America, where the Congregationalist majority tried to repress the Baptist, Anglican, and Quaker minorities. Four Quakers were actually executed, just for being *Quakers*... the most peaceable people imaginable. It took an English parliament's *Act of Tolerance* to sort it all out. So much for fleeing to freedom from the tyrannous domination of The Church.

Two major points bothered me:

Why would anyone want to impose his own religious views upon somebody else? I'm thinking here of the Crusades, the Catholic Inquisitions, and the religious wars of the sixteenth and seventeenth century. In recent years we have seen other examples, of course.

And why was it that, despite all the intolerance and slaughter that Religion has brought to the world, people still took it seriously, in their *billions*?

§ Here meaning 'Big Religion': ie, organised, political, and monolithic.

What was going on here? Every society I'd ever heard of had some sort of transcendental or paranormal element to it, and many of these societies were spectacular achievers in other fields. The Indians, for example, developed arithmetic and maths while we in the West were still developing the pointed stick. The Egyptians built impossibly complex granite structures inside the pyramids, apparently using *copper* tools even earlier than that. And both of these societies were very heavily religious. And I knew that Isaac Newton, often called the greatest scientist of all time, was a religious obsessive.

All this was a profound puzzle that I knew I needed to address for my own peace of mind one day. If rubbish, *why* rubbish? If not rubbish, *why* not?

Interestingly, I gained some insight on these matters by getting involved in politics and joining the Labour Party in a safe Conservative constituency. After a year or so it dawned upon me that quite a number of the people I was mixing with were of a sectarian persuasion very like people in religious groups. The traditional Labourites and the Militant Tendency were at daggers drawn; the International Socialists couldn't get on with the International Marxist Group; and everybody hated the sappy liberal wing. Some people definitely put more effort into doing down another sect within their own party than they ever did in elections which hoped to reduce the Tory majority from 30,000 to something a little more manageable.

This insight, of the tendency towards splitting, will surface again later, when I look at it more closely, and even give it a fancy name because it doesn't seem to already have one.

My other problem, concerning the enduring popularity of religion, remained as a complete mystery. The only conclusion I could come to was that no, all these clever people and societies could not reasonably be written off as *all* fools or knaves. To do this would be, in my view, an unreasonable arrogance. There must be *something* afoot. Something they all shared in common deep down somewhere. But what? And how to

discover it, and disentangle it from all the sectarian baggage and rubbish that was obscuring the fundamental commonality so effectively? Or maybe there actually was no commonality; just random daydreams and mental confections? Sugar pies in the skies? I needed to know.

That was as far as I got in the 1970's. The 1980's saw our family up sticks and change our lives radically, moving from safe and enjoyable circumstances in a leafy Nottingham suburb, to trying to set up and run an organic smallholding from scratch, in West Wales. The idea was to put our Green money where our mouth was, and to become reasonably self-sufficient, while growing garlic as a cash crop to pay for things like phone bills and petrol.

Clearly, this level of change was both exhilarating and stressful. The exhilaration was fun, but the stress eventually caught up with me and floored me, literally, and I was hauled up to bed: 'We've run every test we can think of and you haven't got brucellosis, Weil's disease, liver failure or a bad heart: it's got to be M.E.', the doctor said, just three years into our new life. It was devastating. For the whole of the winter and following spring I slept for most of the day, had lurid dreams, stank of vinegar, and was as weak as.. well, as weak as somebody completely wrecked by M.E.

§ *M.E.*: 'Myalgic Encephalitis'. Also myalgic encephalopathy, post-viral fatigue syndrome, Royal Free disease, Tapanui flu, yuppie flu and a dozen other names, often generalised as Chronic Fatigue Syndrome. Everything goes into hibernation: intellect, emotions, will, and, above all, the body. Some people have a terrible and painful time of it. I was just totally exhausted in all respects.

I obviously couldn't work, but the land still needed rotavating; crops still needed sowing and planting; lambs still needed birthing; and the cow still needed milking twice a day. And of course, our two children needed tending to. Anne worked miracles, every day for six months.

I was no good on the farm, but surely there must be something I could do? Well... on a good day, I could read...

Chapter 2

Darwin's 'Creator'

It may be conceit, but I believe the subject may interest the public

Charles Darwin

*In a letter to his publisher, asking if he would be interested in
On the Origin of Species.*

I began by reading a bit of lightweight science fiction, something I'd previously enjoyed, but which now, I discovered, did not satisfy. I tried other fiction but couldn't get on with that, either. It somehow felt like time-wasting. *Pickwick Papers* just didn't do it any more. My old interests in the paranormal re-surfaced, and I read a couple of pop ghost books, but they were too vague and sensational, and contained photographs that were all too easily fakeable or just plain risible; and none of them contained any sensible ideas on what ghosts really were, and how they came to be. I needed something I could get my teeth into, written by someone I could trust and respect.

One day a friend lent me *Mysteries* by Colin Wilson. I'd once read CW's learned book *The Outsider*, and knew him for an interesting, thoughtful, and responsible writer.

§ If you are not yet persuaded that there are some very strange things going on in the world that science never seems to have got round to properly explaining, I recommend reading something by CW (try *Mysteries* and *Poltergeist* for starters), and by Lyall Watson (*Supernature; Lifetide; The Romeo Error*) and then see if you still feel that way. There are a lot of similar books, many of which are bandwaggoning and unreliably sensationalist. I commend Wilson and Watson as they are both trained scientifically (in biology), and can distinguish evidence from fantasy and rumour. You might also try John G Fuller's *Arigo: Surgeon of the Rusty Knife*.

What this book did for me was to wake me up again to the fact that our universe really is a most peculiar place, which, despite the best efforts of people like my old biology teacher to reduce everything to mindless chemicals is actually packed full of baffling oddities and anomalies.

§ Were you ever told by a science teacher, usually with some glee, that you are nothing but 20 kilos of carbonated water, or whatever, and enough iron to make a nail? And did you, like me, find yourself thinking... 'Hmm.. something missing here, surely... and why is this teacher so pleased to be telling his students that they are essentially worthless?'

Colin Wilson, meanwhile, documents cases of dowsing from maps with pendulums, lucid dreaming, psychokinesis and levitation, among many other strangenesses. How can a bunch of chemicals do such things? We'll be coming back to some of these issues later.

In other words, the problem I already had with Science ignoring ghosts and Ouija board phenomena had suddenly burgeoned into a huge field of anomalous occurrences, including near-death experiences (NDE's), out of body experiences (OOBE's), premonitions and clairvoyance, many of which had been well-attested by people who would usually be regarded as good witnesses: policemen; teachers; clergy; pilots; doctors; university professors, even. I broadened my reading to include the books of Charles Fort and other writings, particularly in the realm of proper psychical research.

§ *The Book of the Damned* and *Lo!*. The 'damned' in the title refers to strange reports and evidence that Science ignores or belittles.

Also *The Reach of the Mind* by Professor JB Rhine and *The Infinite Hive* by Rosalind Heywood.

The more I read, the more I became convinced that Science, for some reason, was ducking or avoiding not just one or two anomalous issues, but a whole mountain of them. Why? Presumably there must be some sort of absolute and logical reason for this.

I eventually came to two conclusions:

- I needed to find out what it was, *precisely*, about all these anomalies that Science found so objectionable, and, of course, why?

I'd come across a quote by William James, the psychologist, to the effect that you only need one white crow to disprove the theory that all crows are black. Thus, a single clear-cut anomaly would blow a fatal hole in any 'absolute' theory at all, whatever it might be.

- I needed to see if I could find this white crow.

So... putting these two conclusions together with my growing conviction that there was something awry somewhere in the way Science viewed reality, I needed to channel my reading down two paths: 'the philosophy of science', which would probably also include the history of the philosophies of science; and some more reading in the realms of psychical research, to see if I could find just one absolutely clear-cut, well-attested, and unfakeable anomaly. Just one would suffice. Then, once I had discovered by what absolute principle Science was dead set against such anomalies, I could hold up my white crow, and say 'But what about this...?' It might be

of no interest to anybody else, especially not biology teachers or chaplains on their respective desert islands, but it certainly would be to me.

Where to start?

§ 'How do you meet an elephant?' 'One bit at a time.'

I thought that I might as well make a start on the history with what was perhaps the most important scientific book ever published: *On the Origin of Species* by Charles Darwin.

I found a Thinker's Library edition in a charity shop and made a start.

§ The Thinker's Library published some 140 academic and factual books for the man in the street in the 1930's and '40's. The books had a strong atheistic and 'rationalist' bias, in accord with the prevailing ethos of the period. More on this mood in Chapter 27.

To my great surprise, I found it to be a very readable work, and not the great wodge of Victorian stodge I was expecting.

In measured sentences, backed by mountains of evidence, Darwin slowly spelled out his sensational theory: that the world's species of plants and animals were *not* created as fixed and 'perfect' entities as had been previously and generally accepted as dogmatic truth, as propagated by The Church.

In fact, Darwin showed, species slowly changed over time, morphing from one form to another, as climates and conditions varied. Thus, finches from one Galapagos Island differed quite significantly in their beak shape from finches from another nearby Island, depending upon what food sources were available. Those birds with the most suitable beaks survived to breed others like themselves; the others didn't. Eventually each island sported its own finch variation.

This in itself was not necessarily earth-shattering news, as people had always known that dogs and pigeons could be bred to emphasise specific shapes and capacities, but Darwin now went a step further.

Up till now dogs had always been dogs: no matter how much you bred them, they remained the same *species*, meaning 'capable of successful breeding among themselves'.

§ Although some might need stepladders from time to time

However, in nature, and over many millennia, Darwin suggested that species themselves could variegate according to the process of 'natural selection', as the Galapagos finches had done, right up to the point when

one localised group of creatures could no longer breed with their previous peers, and thus became what we call a new species.

§ Darwin eventually adopted the phrase 'survival of the fittest' as suggested by Herbert Spencer, the philosopher. This phrase has caused a heap of trouble, as it has been frequently mistaken to mean 'survival of the most brutal' rather than 'most appropriate', as Darwin intended it. More later.

Thus, left to nature, some dogs would eventually become, well... a new species of 'not quite dogs'.

§ All dogs, including Australian dingoes, are descended from wild wolves, and share some 99% of their genes. The dingoes on Fraser Island, off Queensland, are isolated from other dogs. Thus, Darwin would predict, one day they might become a new species. But don't hold your breath; these things take time, and lots of it.

The world-changing book ended with the one of the best finales of all time:

'There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved.'

Stanley Kubrick must surely have had that sentence somewhere in mind when he filmed *2001: A Space Odyssey*.

What struck me most about this sentence, apart from its magnificent sweep and cadences, was the mention of 'the Creator'. I'd always vaguely thought that Darwin was an atheist. How had I come to think that? And what did that 'Creator' signify?

Whatever, to my mind, Darwin made such a strong case for evolution, that surely no reasonable person could gainsay it. But of course, lots of people did gainsay it, led vociferously by The Church who, up till now, had held a monopoly on theories of cosmology and creation.

§ I here mean the Church of England, although the Catholic Church had trouble with Evolution, too. Lots of people still gainsay it:

According to a CBS News poll last month, 51 percent of Americans reject the theory of evolution, saying that God created humans in their present form. And reflecting a longstanding sentiment, 38 percent of Americans believe that creationism should be taught instead of evolution, according to an August poll by the Pew Research Center in Washington.

...according to *The New York Times* in 2005.

The official view was that proposed by Archbishop Us(s)her of Armagh who had in the seventeenth century done a bit of back-calculating through all the generations of 'begetting' in the *Old Testament*, and other sources, and had come up with the declaration that the world was created by God, about 6,000 years ago, during the six days beginning with the evening of Oct 22 4004 BCE. This calculation was anonymously inserted into some *Authorised Versions* of the *Bible* in 1701, and gradually became a dogmatic truth for many, if not most.

§ Were the Archbishop's declaration to be accurate, I find myself wondering what God was doing all the previous morning. As a piece of logic this heroic calculation is so riddled with holes as to be unworthy of serious consideration (especially as the good bishop also calculated the end of the world to be upcoming in October 1996). However, dogma has never had much in common with logic. Hence this book.

The Archbishop also calculated that Adam and Eve were driven from Paradise on Monday 10 November 4004 BCE, and that the ark touched down on Mt Ararat on 5 May 2348 BCE 'on a Wednesday'.

The geologist Charles Lyell and Darwin had showed, beyond any *reasonable* doubt (as opposed to *dogmatic* rejection) that fossilised sea shells, such as those currently embedded in the rocks of Mount Everest, and thus several miles up in the sky, and the endless trillions of animal skeletons that make up the white cliffs of Dover, not to mention all the other-worldly-looking remnants of extinct and fossilised dinosaurs that had begun popping up all over the place, suggested overpoweringly that species had *not* been created perfect and changeless, once and for all, one October a few brief centuries back, (just shortly before the Egyptians started to make their mark), but instead had arisen via the track of 'natural selection', according to the climate and availability of food in a given region at a given time.

§ It seems that fossilised seashells are found embedded in Mount Everest as a result of the enormous geological deformations brought about by India crashing, very slowly, into Tibet, thus forcing up the Himalayas, sedimentary fossils and all, as a crumple zone.

§ 'Evolution' had arrived, and 'fluidity' had entered the world of biology, just as Copernicus and Galileo had introduced it to astronomy three hundred years before. More on fluidity later.

Well, *I* was impressed by Darwin's simple reasoning and evidence. How could anyone not be? It was simply more evidential and *reasonable* than the Creationist view that The Church seemed to be set on defending. It explained more things, more coherently, and more rationally.

§ More on Creationism later. In the meantime, it seemed to me that most Creationists are not idiots, and they know perfectly well that there are real problems with taking every single word of the *Bible* absolutely literally, not least such clear-cut contradictions as 'an eye for an eye' and 'turn the other cheek'. Their problem is that they don't know how else to protest against what they see as the absolute and literally ungodly power that Science has over society.

My own questions here, and perhaps yours, are:

- On the one hand, Why *has* Science become as 'ungodly' as it clearly has?
- And on the other hand, Why is 'evolution' thought of as being 'ungodly' by Creationists, especially as Darwin himself refers to 'the Creator'?

But another problem was troubling me: if Darwin was happy to refer to 'the Creator', which is about as 'paranormal' an entity as you can get, why had my biology teacher, a great fan of Darwin, been so scathingly anti-paranormal? The next step, I thought, would be to read a bit more about Darwin and his times, and then see what modern scientists, the variegated descendants of Darwin, so to speak, had to say. I kept my eye open, and found a couple of books of interesting essays and historical pieces, but then one day I found a recent Penguin re-print of *Origins* containing what looked to be an interesting modern Introduction. What a treasure!

I started with the new Introduction, but was pulled up sharp on page 13, where the author claimed that Darwin was offering 'a purely material' view of Nature. But just a minute... didn't Darwin refer to 'the Creator' more than once in *Origins*, even in that famous final sentence? How can you square 'the Creator' with 'purely material'?

§ If I understood 'purely material' correctly. To me, 'materialistic' meant being greedy for worldly goods, but that didn't seem adequate, and a 'purely material' explanation of something must mean 'an explanation in terms of worldly things', and not other-worldly things like 'the Creator', presumably. This didn't seem like a good enough definition though. I would need to chase this up at some point. I did, of course, and was amazed at what it led to. More later.

I turned to the final sentence, and read:

'There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved.'

I guess you will have spotted what is missing. Where has 'the Creator' gone? And what of that odd phrase 'breathed into'. What did the breathing? Only living entities 'breathe'. I already knew that breathing onto things, to cure or create, had a widely used religious (ie, non-'material') connotation. So what we have here is an unspoken paranormal being of some sort 'breathing' life into 'forms', without actually naming him/her/it. Odd...

I found on page 49 a note which explained: this edition was not the final thoughts of Darwin (ie, the sixth edition, of 1872) but a reprint of the *first* edition of 1859.

My immediate response was 'Why?' Why would anyone reprint an author's first thoughts and not his final ones? Had anybody done this with Einstein or Galileo?

The note went on to add that this first edition was 'in many ways a more clear-cut and forceful version... than the later editions'.

But if I'd written a world-altering book which ran to six editions and sold by the multiple millions, I would be quite sure that I would want my final thoughts reprinted and not my first. I was puzzled.

The Introduction went on to claim that Darwin watered down his theories in later editions after criticisms by fellow scientists Kelvin and Jenkin. But, as the author explained, these criticisms were to do with estimated eras of geological time, and a point of genetics. They were not to do with 'the Creator'. Therefore, presumably, the addition of 'the Creator' to the final sentence of later editions was Darwin's own idea, and nothing to do with 'watering-down', or surely the writer of the Introduction would have said so?

And it was the 'Creator-or-ape' business that *really* mattered (although not spelled out by Darwin in *Origins*) and which caused all the ructions with The Church and society at large, not details of geology or genetics.

§ You may wish to raise all manner of other points here concerning Darwin's views and motives, and there are already plenty of interesting books on this subject, but my personal interests in this book are:

- What did Darwin actually say in *Origins*?
- What have people claimed Darwin said in *Origins*?
- (And, ultimately...) Why do people claim what they claim?

As a matter of interest, in his television series called *Twelve Books that Changed the World*, Lord Bragg quoted that famous final sentence from *Origins*. But again, it was a quote from the first (Creatorless) and not the definitive final edition. Why?

The good lord also claimed that 'We are an accidental event' and 'Darwin thought that life came about naturally'. Given that the meaning of the word 'naturally' in the second quote is less than crystal clear, it is quite apparent that Lord B has also overlooked Darwin's 'Creator'. How could such a respected polymath have missed this? Curiouser and curiouser.

It is difficult for us, 150 years on, to appreciate the violence of the storm that *Origins* caused. The Church, with its power over people's minds, especially in the fields of cosmology and ontology found the notion of Evolution, and its implications for the origins of Man himself, profoundly threatening, and responded with smug derision; much of the press, as is normal, colluded with the powers of the day. Scientists and 'rationalists' thundered back.

§ *Ontology*: the study of 'being' and what it means.

§ *Rationalist*: originally meaning 'one who pursues reason'. Its meaning has changed, however. More later.

Opinions became polarised: subtlety became reduced to slogans; shouting replaced discussion; and then reason, as ever, got forgotten, and the real issue, along with its subtle implications, became subsumed in a welter of aggravation and triumphalism.

§ More on this very important matter later.

This was all very interesting, and I would have loved to have been able to carry on with this research, but Real Life intervened once more, and I was unable to continue with my efforts, being either too ill or too busy with necessary things, like trying to earn a living while firing on only two cylinders

§ Which was rather more than our poor old tractor, a magnificent Little Grey Fergie, one of the greatest design icons of all time.. but my paltry skills and lack of time and energy meant that Fergie didn't like doing the one essential thing a man can ask of his workhorse: starting.

The horribly wet spring of 1986 had been nigh-on disastrous for us, as it wiped out every one of the 60,000 garlic plants which were to be the basis of our cash crop, to pay our council tax and so forth. It was a low point. But there's always sunshine after rain, as I'm sure someone must have said, and to cut a long and rather dreary story short... after a couple of dramatic and anxious years of boom and bust, when I was either full of beans (in the

summer) or completely prostrate (in the winter) my health began to stabilise. By 1990 the M.E. had settled down into a dull wash, leaving me with about 50-60% of my previous capacities, dropping to 30% on bad days.

In those intervening years, I didn't give up completely on the research. (How could I? It was all too intriguing...) and took to haunting local second-hand bookshops when we took a rare trip out, usually to sell a few veg or to visit the dentist. On our level of income, and with two kids to raise, new books were out of the question, so Fred's and Leo's emporia were invaluable, as were the half dozen charity shops in Carmarthen and Newcastle Emlyn. I picked up scores of suitable books and even had to (slowly!) put up a couple of extra shelves.

From the new books I learned that Darwin was very much aware, right from the start, that his book was a bombshell. He was so nervous of the trouble he knew it would cause that he sat on his findings for a full twenty years before publishing,

§ Given this, you would imagine that he would have mentioned 'the Creator' more times rather than fewer in his first edition, wouldn't you?.. to smooth the path a little, rather than to antagonise? But no... he started with seven mentions (of which two were 'positive' as in 'non-dismissive') and eventually revised this up to nine (three positive mentions), including that famous last sentence, years after all the furore had subsided.

And, even then, he published only when his hand was forced by receiving a letter from the orient from an Alfred Russel Wallace, another botanist who had come to very similar conclusions to Darwin.

Charles Darwin became a household name, while Alfred Wallace sank into near-obscurity.

§ But I'll be returning to the excellent Mr Wallace later.

So.. where was I now? Quite shocked; not just by the contradiction between the judgement of Darwin being 'purely material' while the author himself refers positively to 'the Creator' twice in the first edition; but also by the free-hanging 'breather' in the last sentence; and also by what seemed to me to be the strange practice of putting out a non-representative version of Darwin's final views.

Why? Could it be that someone (presumably a modern scientist) was somehow embarrassed by Darwin The Hero of Evolution admitting to some sort of paranormal necessity, and thought that the first edition was thus slightly more 'suitable' than the last? Surely not...

§ It is perfectly true that CD did have problems with 'religion', meaning by this 'Christianity as believed and practised in middle-class Victorian England'. His favourite daughter Annie had died aged 10 after a nasty illness. As a consequence CD could not accept the Christian dogma of a personal and benevolent God. But he was a clear enough thinker to know that a Prime Cause (which he called 'Creator') is an entirely separate matter from 'a personal and benevolent God'. Hence, he insisted on a Creator while rejecting the God of Love of organised religion. Just for the record, he also wrote in a letter of 1879, to a Mr J Fordyce:

'In my most extreme fluctuations I have never been an Atheist in the sense of denying the existence of a God. I think that generally (and more and more as I grow older), but not always, that an Agnostic would be the more correct description of my state of mind.'

This was written three years before he died, and 20 years after *Origins* first appeared. I think we can call this a mature opinion. More on this in the next chapter.

Questions... questions...

I'd heard the name of Richard Dawkins mentioned as a leading light in the field of evolutionary studies, and chanced upon a dog-eared copy of his book *The Blind Watchmaker* in Oxfam.

I turned to Mr Dawkins, a 'neo-Darwinist', to solve my problems.

Chapter 3

Some Puzzling Logic...

Everything should be made as simple as possible, but not simpler

Albert Einstein

As some strength returned I began to feel well enough to do a bit of light work around the farm, and when I faded I still had enough energy to get back onto the paper trail of spooks and why Science seemed not to want to investigate them. There were lots of questions to be answered, and I wasn't even sure what I needed to know in order to begin answering them. I understood that a 'Darwinist' was someone who approved of Darwin's opinions and theories. But what exactly was a 'neo-Darwinist', such as Mr Dawkins?

Darwin accomplished his great theory without any notion of the pioneering work on genetics that was being carried out in another corner of Europe by Gregor Mendel. A decade or two later, as it became apparent that genetics was a powerful new tool, and after a brief period of competitive in-fighting, biologists realised that the two new theories and mechanisms could be elegantly integrated, and neo-Darwinism was thus born:

Evolution via Natural Selection + Mendelian Genetics = Neo-Darwinism

§ ...being the definition given by my *Penguin Dictionary of Biology* (1973). Technically, it is apparently not absolutely correct, but as rule of thumb it works fine.

Good. I understood that, and was looking forward to reading Richard Dawkins' book. After all, he had said 'What staggers me about Archbishop Usher's statement is not that he was wrong (so was everybody else) but that he was wrong with such precision'. Nicely put.

I began *The Blind Watchmaker* and was deeply impressed by the dozen or more enthusiastic plaudits in the first few pages, clipped from reviews by famous people and newspapers. This clearly was a book of some great moment. I read the Preface and was swept gently along by Mr Dawkins' easy and friendly style. This was good stuff. Mr D would surely answer all my questions.

But then something in the second paragraph caught my attention. Mr D states that:

'Biology is the study of complicated things that give the appearance of having been designed for a purpose. Physics is the study of simple things that do not tempt us to invoke design.'

From this I inferred that RD did not think that biological objects show evidence of true design but rather of what might be *mistaken* for design (something that might be designated as 'pseudo-design', perhaps); and that non-biological, ie merely physical, objects show no sign even of pseudo-design, never mind design proper.

§ There is a real linguistic problem here, as English doesn't contain a proper word for 'pseudo-design'. You may think this doesn't matter, but I strongly disagree: watch any tv nature programme and you'll hear the narrator say things like 'the shark is designed for speed', but if questioned, he will agree with RD that the shark is not designed at all. It just looks as though it has been, and for the sake of brevity he is saying the shark is designed because there isn't an alternative word. All well and good, but the fact remains that 'designed' means 'the product of a designer'. That's what the word *means*. To use it for the sake of brevity or metaphorically, is to court misunderstanding in the listener and, I'm afraid, sloppy thinking in the speaker. More on this slippery use of language later.

But do not molecules have 'design' then? Or atoms? Surely, what makes an atom of oxygen different from one of helium is its 'design', just as much as the 'design' of a vole is what differentiates it from a hippo? Of course, biological 'designs' are far more complex than atoms, but the *principle* of design (or 'pseudo-design') still holds true as much for an atom as for a vole. Would anyone deny this? Would you?

If an atom did not have any element of design, what would it be? Some sort of... mess. At the very least, it would not be 'an atom'. How could it be? It is its very design (of an identical nature to biological design or 'pseudo-design') that gives it its identity as an atom. You may think this is unimportant, but I insist it is not, for reasons we will return to.

RD then goes on to state:

'(..man-made artefacts like computers and cars) are complicated and obviously designed for a purpose, yet they are not alive, and they are made of metal and plastic rather than of flesh and blood. In this book they will be firmly treated as biological objects.'

Now hang on there, Professor!

It seems to me to be entirely unreasonable to 'firmly treat' a mechanical item which is quite clearly designed for a purpose but *not* alive, as 'a biological object': ie as an object that you are suggesting is *not* designed for a purpose, but which *is* alive. The disparity is just too great. One might just

as well say that 'This horse is dead, while this other one is alive; but for the purposes of my argument I will treat them as both being alive'. Starting from the premiss that a computer is directly comparable to a nightingale, or that a goldfish is directly comparable to a bicycle, is bound to lead to faulty conclusions concerning the nature of life and design, surely?

I was beginning to be worried by what I was reading. Then, over the page RD states:

'Machines are the direct products of living objects; they derive their complexity and design from living objects, and they are diagnostic of life on a planet. The same goes for fossils, skeletons and dead bodies.'

Oh, come on now!

I appreciate that the point the writer is making is one of being 'diagnostic of life', but... 'products of 'living objects"'? .. Yes, OK, 'living objects', as long as you and I regard ourselves as 'objects', but surely Mr D is being more than a little disingenuous here? 'Living objects' do not create anything simply by virtue of 'living'. '*Intelligence*' is the key to producing computers and cars and any sort of machine or artefact from a sun-baked pot upwards, is it not? Dogs are 'living objects' and so are jellyfish and protozoa and geraniums, but you and I are not like them. We are very particular sorts of 'living objects' who have extraordinary creative capacities, well beyond those of dogs and geraniums. Some 'living objects' can write interesting books on biology, for example, which requires a lot more of the writer than basic 'living'.

As an example: 'living objects' in the form of humanoids, just 'living' and purposelessly kicking sand around on the seashore, did not make the semiconductor.

§ Semiconductors, and the chips in your computer are made from very carefully manipulated slivers of silicon, which is itself made from sand, via an extremely complex and hi-tec series of chemical and physical treatments and processes.

It required intelligence and purpose to do that, plus all sorts of other human qualities like:

- the *desire* to make something new;
- the *imagination* to foresee how a semiconductor might be possible;
- the *planning* and foresight to organise the work;
- the *will* to actually start the work;
- the *persistence* that saw it through;
- the *culture* that enabled modern scientists and thinkers to systematically build on the work of their predecessors

- and, to repeat myself, the consistent *intelligence and purpose* that guided the process through its numerous stages of failure through to success.
- and, of course.. that mysterious entity we call 'inspiration' or '*intuition*', without which, I suggest, nothing new ever happens.

§ More on Intuition later.

§ To claim, as RD does, that a car is an assembly of parts, each of which obeys certain physical laws is quite true; but it is not the whole truth by a country mile. At the simplest level, if you fit the wrong carburettor to a car, it will no longer be 'a car', in that it will not start or move, and thus will not fulfil the job it was designed to do by the intelligence of people *with a purpose and for a purpose*.

If you then select the correct carburettor and fit it accurately, and then tune it properly, then your 'assembly of parts' (with any luck) will once more be restored to being a car: ie, after the application of *intelligence, will, and purpose* on your part.

Add to this the obvious need for every single one of the 'parts' in the 'assembly' to have been carefully designed, with enormous and sustained quantities of intelligence and purpose, all the way from the smallest nut to the engine block and body shell, and RD's definition of a car as 'an assembly of parts' just looks, well.. simplistic and naïve. A shocking thought, but how else would you describe it?

And apart from all the above, any 'assembly' is in itself a work of intelligence, by definition.

To compare a computer, which is clearly the result of decades of intelligent design with a fossil, which you are claiming is *not* the product of intelligent design... is, well.. let us say... 'very unapt indeed'.

I was by now quite alarmed at what I was reading, and I was still only on page 2.... No fewer than three very questionable propositions in two pages?

§ Let's be clear what they are:

1 that a goldfish gives the impression of design, while an atom does not.

2 that a goldfish bowl*, is treatable as a biological (ie 'living') object.

3 that merely 'living' is enough to produce creations, with no mention of intelligence, purpose, will, etc.

*One might object that a goldfish bowl is not comparable to a car or computer as a bowl is not a machine; but we are here talking of the principle of design, not the complexity of the artefact, and a goldfish bowl requires the principle of design just as much as a Jumbo Jet does.

I had the distinct impression that these highly questionable propositions were going to form the premisses that the rest of Mr D's argument would derive from.

A little further on, still on page 2, he says:

'Our brains were designed for hunting and gathering.'

'Our brains were designed'... but apparently not as you and I know it, Jim. I could see no way of making sense in this Humpty-Dumpty world, where words mean what RD chooses them to mean, no more, no less.



'When I use a word,' Humpty Dumpty said in a rather a scornful tone, 'it means just what I choose it to mean - neither more nor less.' (from *Alice Through the Looking-Glass* by Lewis Carroll.)

'Words are our servants, not our masters.' (from *The Blind Watchmaker* by Richard Dawkins.)

This was rather alarming to me, especially as Mr Dumpty continued with: 'The question is,' said Humpty Dumpty, 'which is to be master - that's all.'

'Designed' *means* 'constructed or delineated for a purpose, by an intelligent mind'. Check in any dictionary. And check whether there is also an entry for RD's definition, which is... well, I don't know what his definition would be, except possibly 'something which has *not* been constructed or delineated for a purpose, by an intelligent mind'.

I was quite shocked by all this. I was expecting a pleasurable read which would fill in lots of blank spaces for me, and which would explain my problems with why Darwin might be called 'purely material' and why spooks were unacceptable to science. But instead I was confused right from the start by what seemed to me to be several patches of seriously muddled logic.

Obviously, my next reaction was of disbelief. This was a world-famous professor, whose book had been lauded to the skies,

§ ... and who in 1995 was to become Professor for the Public Understanding of Science at Oxford: the highest biologist in the land, if not the world.

and here was I, a flipping gardener on sick leave, picking holes in his logic. Surely I must be mistaken?

I checked and checked again, but couldn't find a flaw in my thinking on any of the four quotes above. I hope you, dear reader will have checked those paragraphs very carefully. Have I made an error of logic? I still think not.

§ I do most powerfully realise that to criticise anything in the writings of such an eminent man is heresy in eyes of some. But scientific progress is based upon disagreement and criticism, as Professor Dawkins would be the first to agree. Please... consider my comments simply through the eyes of logic, and not of any philosophy or long-held and unquestioned belief. I repeat my promise that no harm will come of this. I also promise that much good will eventually derive, if you read on with an open mind.

I read on, but was now on my guard.

What I urgently wanted to learn from *The Blind Watchmaker* was:

- Question 1: Why was RD, and presumably neo-Darwinists in general, so dead set against there being design in nature?
- Question 2: What precisely is 'materialism' in the scientific sense, and how precisely does it relate to this 'design'/'no design' business?
- Question 3: RD's views on the 'purely material' nature of Darwin's theories.

And, with any luck...

- Question 4: By what theory or argument did Science (as represented by RD) *know* that materialism was true and all other views were untrue?
- Question 5: And, what alternatives to materialism were there, anyway?

Lots of other questions arose of course, but that was plenty to be going on with.

Mr Dawkins.. lead on! Explain all!

I began a very careful read....

Let's cut to the chase. Did Mr D answer all my questions for me? No.... I'm afraid not.

He did give a very lucid description of the principles and processes of Evolution and Natural Selection, and an introduction to genetics, but the nearest he came to answering my questions were:

- Question 1: No explanation or discussion; just a bald declamation that there simply *is* no design in Nature. It is all an illusion. What we perceive as 'design' is simply the result of tiny incremental changes in genes and DNA, Naturally Selected over aeons of time.

§ But the complexity of living creatures would seem to be entirely in opposition to RD's notion of *The Selfish Gene* (the title of RD's first book). Surely, if it is allowable to give a gene the highly anthropomorphic quality of 'selfish', then surely that gene will do what selfishness does best: looking after Number One, and thus selfishly aiming to replicate only itself? That's what 'selfish' *means*.

But all the designs (or 'RD-non-designs') of Nature point to quite the contrary state of affairs: a bewilderingly complex display of cooperation between genes. If no cooperation, then no structure of any sort; just a pile of genes. At best, any 'selfish gene' is the progenitor of a cancer, not of an immensely complex and cooperative human body or even a geranium. Or did 'selfish' now mean something else, too? More confusion. We'll come back to this 'selfish gene' business in Chapter 27.

- Question 2: There is no mention of materialism in the book, so no definition is offered.
- Question 3: This was actually a bit disturbing. It is clear that Charles Darwin is RD's hero, and quite right too, but RD seems to have forgotten that CD mentions 'the Creator' in a positive manner in each of the editions of *The Origin of Species*. In fact RD says that any explanation that has the need for 'a Creator' is 'transparently feeble'. That's one in the eye for poor old Darwin, then, hero or not.

§ An apology: in a previous book, *Scenes from a Smallholding*, I stated as fact that the first edition of *Origins* contained no references to 'the Creator', whereas it actually contains seven, of which two are 'positive', as in 'not dismissive of'. To repeat myself, this number rises to nine mentions by the sixth and final edition of which three, including the famous final sentence are 'positive' in the same sense as above.

I am embarrassed for my error, and apologise. Sheer carelessness. It won't happen again.

He also goes on to say that Darwin's explanation for all the improbable creatures we see in the world around us is that they came into being

'...by gradual, step-by-step transformation from simple beginnings, from primordial entities sufficiently simple to have come into being by chance.'
Richard Dawkins

This, I'm afraid, is simply not true.

Not only did Darwin acknowledge 'a Creator' in all editions of *Origins*, but he also states quite unequivocally

'...I have nothing to do with the origin of the primary mental powers, any more than I have with that of life itself.'
Charles Darwin

Please read that sentence again, then check it for yourself:

1st paragraph, Chapter 7, 1st edition; or 1st paragraph, Chapter 8, 6th edition.

- Question 4: There was no discussion of why materialism might be true, and no proof offered.
- Question 5: No discussion of alternatives to materialism either, although there is mention of 'ying (*sic*) and yang'. The options he did discuss could all be lumped together as 'materialistic', as I understood the term, though they were never called such.

Now obviously it is silly to blame a writer for not writing the book you want him to have written rather than the book he actually wrote, but in this case I think my comments are valid, because my questions are all relevant to the deepest level upon which neo-Darwinist claims seem to be based. Please read the questions again and check whether you agree with me in this judgement of them. For example, 'materialism' seems to be an underlying premiss behind many of RD's claims, but it isn't even mentioned in the book. Surely we could expect to be told why materialism is true, as so much else seems to depend upon this?

I found lots of other chunks of faulty logic too, of which perhaps the most important is RD's complete neglect of the relevance of Mind in the role of human creativity, and in the analogies he makes.

§ I'm using 'Mind' with a capital to mean 'The faculty of mind', as opposed to 'changing one's mind' etc. The capitalisation also helps to draw attention to the extreme importance of this faculty. From now on I will often capitalise Life and Consciousness for the same reason

For example, he shows us a page or two of electronic critters he calls 'biomorphs' which have all resulted from a computer program he wrote. He says that all the diverse little forms he shows us are 'randomly mutated

progeny' which have developed 'over many generations of cumulative evolution'.

But surely the force behind all this diversity was his own mind, which devised the program, and the instructions he inserted into the program?

The truth of the matter, surely, is that the machine carried out RD's intelligent instructions?

Thus the analogy that he is trying to draw between his 'computer-generated-biomorphs' on the one hand, and 'naturally-evolved-lifeforms' on the other, must require similar intelligent instructions for *both* parties, if the analogy is to be apt?

It's as if for RD Mind as a creative force simply doesn't exist, although his own academic brilliance must surely suggest otherwise! I was very surprised that there is no mention at all in the index of *The Blind Watchmaker* of either 'mind' or 'intelligence'.

Why such total dismissal of Mind as a force? RD often refers to 'our minds', 'your mind', 'my mind', 'the human mind', 'rational minds', etc in the text.

Surely he must have known that he had to acknowledge the input of Mind, Purpose, Will etc into the design of the computer hardware and software that he was using, and into all his own tireless programming of biomorphs, if his analogy was to be at all apt?

Any why so *many* false analogies? Computers, cars, locos... *all* the products of endless intelligence, purpose, will etc... equated willy-nilly with extraordinarily complex living creatures which RD claims are *not* designed by intelligence, purpose, will, etc. Where was the logic and reason in all this?

§ And what about RD's claim that the self-generation of Life from non-life all depends on there being enough 'time' in which for it to occur? This is simply an inappropriate argument. Of course you can argue quite sensibly that given aeons of time a fish might morph into a human via the process of evolution via natural selection; but you can not argue sensibly that a stone might morph into a fish, no matter how many aeons of time you give it. A fish is alive; a stone is not. Evolution is not an appropriate process to look to. Thus time does not come into it at all.

And the misrepresentation of Darwin's views? Accident? Presumably. But as a careful and sophisticated scholar RD surely must surely have noticed at least one of CD's two positive mentions of 'the Creator' in his personal copy of the famous first edition, even if he managed to miss CD's denial of having any views on the origin of life? And could he really be ignorant of the 'Creator' in that famous last sentence of the final, definitive, edition?

I'm not given to conspiracy theories, but this did seem particularly odd... First the writer of that Introduction, and now the highest authority in the land, both misrepresenting Darwin's clearly stated views.

§ Darwin is at pains to make his views absolutely clear via the epigraphs he presented on the first page of *Origins*. Some reprints omit these brief quotations, but they may be found in full, in the original rather stodgy language, in the Gutenberg Project e-versions at http://www.gutenberg.org/wiki/Main_Page

Common to both 1st & 6th editions:

'But with regard to the material world, we can at least go so far as this - we can perceive that events are brought about not by insulated interpositions of Divine power, exerted in each particular case, but by the establishment of general laws.'
Whewell: Bridgewater Treatise.

and...

'To conclude, therefore, let no man out of a weak conceit of sobriety, or an ill-applied moderation, think or maintain, that a man can search too far or be too well studied in the book of God's word, or in the book of God's works; divinity or philosophy; but rather let men endeavour an endless progress or proficiencie in both.

Francis Bacon: Advancement of Learning.

From these it is clear that CD believed in 'general laws' (Whewell), and in 'God' (Bacon). How he squares the two apparent opposites is not so clear.

However, by the time of the 6th and final edition, he clarifies things by adding a third epigraph:

In the 6th edition, but not in the 1st:

'The only distinct meaning of the word 'natural' is STATED, FIXED or SETTLED; since what is natural as much requires and presupposes an intelligent agent to render it so, i.e., to effect it continually or at stated times, as what is supernatural or miraculous does to effect it for once.'

Butler: Analogy of Revealed Religion..

This third epigraph makes it clear that Darwin believes Intelligence forms what is 'natural'. In other words an intelligent creative force makes nature/the world/the Laws. This would tally with his use of 'the Creator' in the texts of *Origins*, and his comment in that letter to Mr Fordyce in 1879, in which he says: 'I have never been an Atheist in the sense of denying the existence of a God.'

What was going on here? I'd seen Mr Dawkins many times on television and he seemed like a perfectly honest man. Why were there so many lesions in his arguments? And how had he written such an apparently

comprehensive book without understanding how analogies may and may not be used, and without addressing any of the fundamental questions I've listed above? Why was so much apparently just taken for granted, in fact? I must be missing something. I checked and re-checked, yet again, but could not put my hand on my heart and say my critics were wrong. They were simply not wrong in the eyes of logic as I understood it.

§ Please do the same, dear reader. Check and re-check my logic above. If you find you must agree with just one of my comments on RD's text, then it follows that RD's logic is at fault in at least one place, and this single white crow makes his whole argument potentially faulty and thus in need of close attention from top to tail.

All the same... I was very uneasy. How was it nobody else seemed to have noticed all these errors? What about RD's peers? All those people who wrote glowing testimonials in the front of *The Blind Watchmaker*? What about the entire scientific community, for heaven's sake? Had nobody else spotted what I had? Impossible to believe. Impossible. I must be wrong, somehow.

More and more questions....

Time to get more informed.

At the very least, I needed to carefully find out what it was I needed to find out....

Chapter 4

Why Materialism?

None are more hopelessly enslaved than those who falsely believe
they are free
Goethe

Our new house cow 'April' produced her first calf in the first spring of the new decade. A perfect and beautiful little creature, but still-born, poor beauty, and a cause for wonder for us all: immaculate hooves, eyes, nose... just no spark. What, I wondered, was that spark? Where had it come from? Where had it gone?

§ In later years I was to see this 'spark' go from the eye of a number of animals, including pet dogs, sheep, and a cow. One second they are alive, but then the eye somehow alters. It's very difficult to explain, but if you've ever experienced it you will know what I'm talking about. The heart may beat on for a moment or two longer, but the animal has already died. One is then left with the puzzle of the fact that a few seconds ago this assemblage of 'selfish genes' was alive, but now it is not, although the genes remain precisely the same as they were a moment ago.

Richard Dawkins scorns the idea of a 'vital spark' and compares it with the sparks emitted by a locomotive. This is another extremely unapt analogy, whether the 'vital' spark exists or not.

And how did green grass and water produce those immaculate hooves and eyes anyway?

We buried her perfect little form in the orchard, rather drippily, then turned to the bursting practical problem of what to do with all the milk April was still producing. We couldn't possibly drink it all so we bought in a couple of infant Jersey bull calves, who would otherwise have gone for veal production abroad, banged up in crates for their short miserable lives.

In fact, we ended up with two milking cows and four calves that spring. Feeding time was a five-star pantomime: milk, buckets, whipping tails, and butting calves everywhere. The kids pitched in. Feet got trodden on. Yelps were yelped. Butter was made. Cheese was made. More butter. More cheese. It was a great spring, apart from our poor lifeless calf.

§ More detail in *Scenes from a Smallholding*, along with a discussion which explains why cheap milk means 100,000 calves being killed at birth every year.

Reading *The Blind Watchmaker* had brought me no closer to answering the question of 'Why does Science seem to be pathologically opposed to Anomalies?',

§ Another initial capital. I'm using it here to indicate 'anomalies of an apparently paranormal nature', like poltergeists, telepathy, etc.

although I was now beginning to suspect that the level at which rejection was being made lay very deep within the philosophy of science, and it looked as though 'materialism' was somehow involved in this.

So my next task, I thought, would be to first find a precise definition for materialism, and then look deeper into the principles of science... which meant I was going to have to broach the bogs and swamplands of philosophy, isms, and ologies...

This did not fill me with joy, as my previous forays into this field had been pretty baffling. Every writer I had tried to read, from Berkeley to Nietzsche had left me more puzzled than when I started.

§ In my teenage days I thought I ought to read a bit of Marx, and borrowed *Capital* from the village library. By the time I'd got to the bottom of page one I realised that there were at least three words I'd never come across before, and another dozen whose meanings I was unsure of. As for the ideas expressed, well I didn't have a clue. I turned over the page and found someone had pencilled onto the top margin 'Don't bother, it gets worse'. Some of the best advice I've ever had.

Actually, I did try Marx again in my political years, but with the same result. This time, however, I was older and a little more self-confident, and found that words and phrases that other people seemed to understand were just too perforated and slippery for me to claim to have fully grasped. I never did work out what 'dialectical materialism' was, other than some sort of cut-and-paste free for all, involving some sort of 'materialism'. The m-word again. (Interestingly, 'materialism' isn't mentioned in *The Communist Manifesto* either.)

The basic problem for all philosophers, and even more for their poor long-suffering students, is 'What do words actually *mean*?' You can't explain a theory without using words, and you must be very clear about what you want your words to mean. This is not as easy as it sounds, as Humpty-Dumpty knew full well.

§ As an example: take the word 'window'. Can you define it, so as to include all windows and exclude everything that is a 'non-window' (a dictionary won't help with this, incidentally)? Bet you can't. 'A window is a hole in a house wall, filled with glass' doesn't do it, does it? Some windows are filled with plastic, or nothing at all; some windows are not in houses, but in sheds, etc; pre-Tudor windows were made of sheets of polished horn, and were portable. Is a skylight a window? Is a porthole? A mesh-

filled panel in a tent? And what about a wall made entirely of glass? Is it a window? And what about car windows?

You can have hours of fun with a friend trying this game of definitions. And I bet you eventually come to the conclusion that a word means only what we at this present moment agree it to mean. (Humpty-Dumpty's problem was that he alone 'agreed' on what a word meant and someone else's agreement was not required: the world of paranoid delusion. Richard Dawkins seems to risk sharing this problem when he says: 'Words are our servants, not our masters', presumably including here the word 'designed', as previously noted.) And what will matter most in your final definition will not be the physical characteristics of a window, or a book or a nail, but its purpose. And this is for a simple physical object like a window. Note the intrusion of that non-material, intelligent quality of 'purpose' again.

So, bearing in mind how difficult it is to pin down meaning in a simple everyday word, what hope have we, when reading any philosopher, of coping with all manner of concepts and abstractions like 'sense' or 'feeling' or 'God' or 'soul' or 'being' or 'reality', or even 'I'... especially when the text may have been translated from a foreign language whose subtleties of meaning do not carry across perfectly? (Incidentally, can you define 'I'? Worth a try... and bear in mind while you are trying, what distinctions you find yourself making between things you might previously have thought were a unity.)

§ An example of the trickiness of translation: the first line of the *Lord's Prayer* is traditionally translated as 'Our Father which art in heaven..', but the original language it was written in is apparently a much subtler tongue than English. According to Neil Douglas-Klotz, in *The Hidden Gospel*, the original Aramaic phrase of 'Abwoon d'bashmaya' might be equally well translated as:

O Thou, the One from whom breath enters being in all radiant forms...

Or

O Parent of the universe, from your deep interior comes the next wave of shining life...

Or

O fruitful, nurturing Life-giver! Your sound rings everywhere throughout the cosmos...

Or

Father-Mother who births Unity, You vibrate life into form in each new instant.

Translation is a serious business. Consider the scientific and philosophical implications of these alternative versions, which are quite missing from our traditional *Bible* version. 'Resonance' and 'Light' seem to feature strongly, for a start. More on 'resonance' later. And 'light'.

I forget how now, but I did eventually come up with a definition of the philosophical theory of Materialism (for which I will now use a capital, to distinguish it from the everyday meaning of 'obsessed with the things of the material world; like shopping, say'.)

Materialism: the belief that everything in the universe began with Matter: originally meaning nuclear particles and elemental chemicals, and eventually, gases, water, and rocks.

Since Einstein has showed via $E=mc^2$ that Matter and Energy are interchangeable, a modern Materialist would claim that Matter/Energy, (including electricity, gamma rays, etc) and *only* Matter/Energy, lies behind everything in the universe (I'm capitalising these profound principles of Matter and Energy to distinguish them from everyday usages).

§ That simple-looking formula, $E=mc^2$, conceals the fact that 1gm of Matter apparently contains more Energy than 20,000 tonnes of TNT. Don't mess with it.

Straight away this led me to another problem. If only Matter/Energy lies behind everything, then where does that leave Mind? And Life? And Consciousness? Was Mind just Energy, like electricity? And Life? I was struck again by the fact that RD had simply never mentioned 'intelligence' or 'mind' in all his analogies. In fact (but I may be wrong here) I don't think either word is mentioned as a proper active entity in the entire book. Was he avoiding the subject? There's that conspiracy theory again...!

§ Don't worry... the conspiracy phase passed. I'll explain how and why as we progress.

Another couple of years buzzed by: more calves, more lambs, more veg, more experience. We'd long been members of the *Henry Doubleday Research Association*

§ *HDRA*: now re-branded as *Garden Organic* (www.gardenorganic.org.uk)

who were a fount of information and guidance on how to grow crops organically. I drifted into writing odd articles for their newsletter and magazine, and gradually became a regular columnist, under the banner of *Smallholding Scene*.

We continued to improve our techniques and our tiny income grew a little every year. But the twin truths were that yes, we were coping, and our skills were improving, but the fact we could not avoid was that my health looked as though it was never going to return to 100%... which left us zero wriggle-room for either coping with disasters or for Great Leaps Forward. If we were both 100% fit, we knew we could make the smallholding work properly and could implement all the bright ideas we had for cutting down

labour and improving efficiency, such as coppicing the woodland, and running a generator from the stream at the bottom of the cwm to heat the polytunnels. But anything less than our combined 200% meant an eventual slow but certain stagnation and long-term gradual decline.

I'd read quite a lot of pop science books by this point and it struck me that all of them had the same thing in common with RD's book: they avoided the concept of Mind whenever possible, and all seemed to take Materialism as a proved fact: in other words, as the sound foundation upon which all other theories might be safely built.

§ One Scientist I heard on the radio, whose name I didn't catch, said that 99.9% of scientists believed in Materialism.

However, in none of these books was Materialism ever openly discussed, debated, or proved to be a Truth, even though to my mind it was seriously questionable, as it seemed to require something from nothing: ie, Life from non-life. Why was Materialism never discussed? And where might I find such a discussion? It must have been discussed *somewhere*!

I'd also come across several claims such as 'Scientists do not believe in God'; 'No scientist takes the supernatural seriously'; 'Telepathy is bunk'; and so forth.

§ But not 'all scientists' do not believe in God (sorry about that clumsy double negative). I'd heard of several who do, including Dr Francis Collins, the head of the Human Genome Project, who had become an adult convert to Christianity. Working in the same speciality as the atheistic Professor Dawkins, but a deliberate Christian? More and more puzzling.

These were all clearly Materialist statements, but what struck me most was how 'Materialist' and 'Scientist' seemed to have become conflated to mean the same thing. Say 'Scientist', say 'Materialist', except for the few who seem to have been side-lined by the writers of books who claim that 'Scientists don't believe in God'.

The notion that **Scientist** = **Materialist** was a new idea to me, but it was beginning to explain why Science wasn't interested in spooks and flying plates and all the thousands of other weird Anomalies that Colin Wilson and Lyall Watson and scores of others have reported down the centuries. I could imagine that a spook or telepathy would be pretty difficult for a Matter-only philosophy to explain.

But my over-riding problem of the moment was that I could not see how Matter/Energy (ie, rocks, gases, lightning, radiation etc: none of which are regarded as being alive in any sense) could have produced out of themselves *alone* anything that might be called Life. Surely that would mean something coming from nothing? The Greater arising spontaneously from the Lesser? Wouldn't that be 'magic', or 'a miracle'... the very thing that Science itself seems to despise?

But presumably, this was just a matter of my own ignorance, so I went to see a friend who had a degree in palaeontology to ask if he could clarify things for me. By coincidence he was reading RD's first book, *The Selfish Gene*, when I arrived. I asked him what he thought of it. He looked puzzled and even a bit pained. I explained that I'd just read *The Blind Watchmaker* and had found lots of logical flaws in it. He looked flustered and then impatient. 'I don't see how Life can have spontaneously occurred just from chemicals', I explained. My friend's impatience became hard for him to conceal. Then he said, somewhat testily, 'Making Life is easy....' and went on to baffle me with long words about genetics.

But it was that phrase about making Life being easy that caught my attention.

Really? *Easy*? It had been done then? And presumably many times if it was easy. Another gap in my knowledge. They were piling up.

§ Can gaps pile up? I'm reminded of a friend who said that some days the local carpark was packed full, but on other days you couldn't move for empty spaces.

But I was making progress. At least I now knew roughly what I was looking for, and I knew what Materialism was.

A couple more things were now bubbling to the top of my list:

- To discover who had made Life and how easy was it? And why hadn't I, with my long-standing interest in science, ever heard of it? Surely it would have been in all the newspapers? Nobel Prizes...?
- And as Materialism seemed to require the bothersome spontaneous creation of Life from non-life, what alternatives to Materialism were there? There must be alternatives, surely? Or were the bumbblings of The Church that had bored and baffled me for so long at school, the only alternative? *Surely* not...

- And then there was that niggling issue of how 'Scientist' had come to mean 'Materialist', even when some of them clearly weren't. I couldn't work that one out at all.

Maybe I should start right at the bottom, and define 'Science'. I consulted a few books and came up with:

Science:

A systematic means of investigating the world via the process of Hypothesis, Evidence and Theory.

A Hypothesis (a smart guess), when backed up by adequate Evidence (data amassed by observation or consistent experiment), is promoted into a Theory (a temporarily accepted 'truth').

This Theory is held as the best available until some other Hypothesis should be backed up by enough persuasive Evidence to replace it.

A scientist seeks to explain an observed Effect by explaining its Cause and the Mechanism that links Cause to Effect. For example, the issue of why there are so many species in the world (an Effect) was explained by Darwin thus: the Cause of speciation was lots of slightly variable infants being born into varying circumstances; the Mechanism was Natural Selection, which ensured that only 'the fittest' survived to breed more infants suited to the local circumstances, eventually leading to new species being formed.

A classic case of the scientific process.

Three points:

1 Science is essentially a *process*, which constantly updates and upgrades, replacing old Theories with newer, bigger ones, which include greater amounts of Evidence.

§ For example, the Flat Earth Theory gradually gave way to the Spherical Earth Theory in the popular mind as more and more evidence piled up from global voyagers (although the ancient Greek philosophers and every master mariner since those days, including Columbus, already knew the Earth was round).

The President of South Africa, Paul Kruger, received a pioneering American sailor who had docked at Cape Town during his solo trip round the world in 1898. The President was a Flat Earther, and remained so even after his meeting with the sailor: "'You don't mean round the world," said the president; "it is impossible! You mean *in* the world. Impossible!" he said, "impossible!" and not another word did he utter.. to me.' This was despite the fact that a Phoenician sailor had rounded the same Cape in 600BC and almost certainly knew that the earth was not flat. Old Theories die a very slow death, as

in the saying 'I've made up my mind; don't confuse me with the evidence'. We will be returning to this tragic human propensity later.

2 Thus, being essentially a process, science has, or should have, no dogma except the belief that logic, reason, and the principle of cause and effect should not be violated.

§ 'Nothing comes from nothing; nothing ever could' from *Something Good* by Oscar Hammerstein II in *The Sound of Music*. As neat an exposition of the Law of Cause and Effect as I've ever come across.

'Ah! But what about the wacky world of quantum physics?' I hear you cry. We'll come to that later.

3 There is no mention of Materialism in this definition of 'science'.

I must point out that the definition above is my own, assembled from many others. However, none of these other definitions mentioned Materialism either. Check for yourself in a few dictionaries.

*So how had 'Materialist' become near-synonymous with 'Scientist'?
And did it matter?
And if so, why?*

I feel the need to belabour this one a little... just to be clear...

A general view of scientists is either of people who spend their whole lives wearing lab coats and peering into microscopes, or standing in front of blackboards full of Greek and squiggles. But the ordinary GP and dentist think of themselves as scientists, as do meteorologists, psychologists, and engineers and technicians. So too, as I recently discovered to my complete surprise, do yogis. Their reasoning is that they approach their business in a pragmatic, empirical, and systematic manner, questioning everything as they go, just as any other scientist does.

§

Pragmatic: solving problems in a realistic way according to present conditions rather than obeying fixed theories, ideas or rules.

Empirical: relying on or derived from observation or experiment rather than dogma.

A general view of yogis is of people who spend their whole lives trying to poke their toes up their nose. This is erroneous. More later.

A practical, workaday definition of a scientist, is 'someone who works according to the scientific method', either in day-to-day medicine, say, or in some sort of research establishment.

The scientific method for a researcher goes like this: someone comes up with an idea

§ Now where did that idea spring from? More on Intuition later.

that he thinks will explain something that is at present a bit of a puzzle. He then devises experiments or carries out observations to see if his idea (his 'Hypothesis') is actually valid: does it solve the puzzle? Yes or No? If the Evidence does stack up, he will publish his findings in a learned journal, like *Nature*, where like-minded researchers (his 'peers') will either support his findings and Hypothesis or rip it to bits. If it passes this peer review, it is likely to be accepted as a Theory.. ie, the best explanation we have, *so far*.

That little phrase 'so far' is vital. No Theory is taken to be an absolute Truth. It is universally accepted that sooner or later some other, deeper and more inclusive Theory will overtake it. In other words, science should never get bogged down with a dogma: a 'Truth' of any sort. This is what made science such a breath of fresh air after centuries of Religious dogmatic absolutism, where logic didn't get a look in, and if the Pope said 'jump', you jumped or paid the price.

§ For example, Giordano Bruno, a priest, was burned at the stake for jumping in the wrong direction. More on him and Galileo later.

Now I felt I was beginning to see the way ahead. The most pressing problem now seemed to be the question of how easy was it to make Life? Back to the books...

Chapter 5

A Positive Alternative...

The one thing that scientists ought to be is humble, because they, more than anyone,
know how little they can explain
Professor Steve Jones

I had no idea where to find out about how to make Life, and as this was in pre-internet days I just kept reading what came to hand in our local library and in second-hand and charity shops, hoping that I'd strike lucky one day. I did find a couple of books on the history of science, but I couldn't find any evidence of Life having been manufactured. They were pretty old books, however. I obviously needed something more modern. I kept my eyes open.

But meanwhile, I'd had more luck on the philosophical front. Leo the Books had let me have a 1911 edition of the *Encyclopaedia Britannica*, minus index unfortunately, for £30. It was a lot of money, but it bought 28 volumes of beautiful leather-bound volumes of a thousand pages each. It would contain all I needed to discover about the basics of philosophy, and a lot of early science history as well. All I needed was lots of time to read through it all. Where should I start? I spent a week flipping through the volumes, making note of any article I thought I should return to. There were hundreds, all the way from Abelard to Zwingli. It was going to take years.

Fortunately, I was distracted from this endless task a week or two later when I was unexpectedly introduced to a professional biologist, of whom I had heard, and who had at some point been an editor of a well-respected scientific journal. He had also written what looked like being an interesting book.

Several of us sat round a table, chatting. Then I mentioned to the biologist that I was reading up about Life and so forth, and Richard Dawkins' book, and my problems with it all, and how Materialism seemed to be very shaky, as it required what seemed to me to be magic, and could he help me? Indeed he could and explained about Evolution. 'Yes', I said 'I understand all that, but what about the origin of Life? Life must have somehow come into being before Evolution could take place. So how does Materialism explain that?' He smiled the smile of The Wise addressing The

Foolish and spoke. I remember his words and my reply absolutely verbatim:

He: Chas... what you must understand is that everything is mineral.
Me: What? Even this conversation?

I hope you will understand why I've put this exchange into a box. I simply could not believe what this famous man, this minor pillar of the Scientific Establishment, had just said to me.

Let's be clear: 'Everything' means *'everything'*... from stars to stones, to Life to Mind to Consciousness... to the very meaning of the words you are reading at this moment. That is what 'everything' means. Stars and stones, OK: mineral; no question. But laughter, compassion, love, meaning, purpose, intelligence? All *'mineral'*?

It was back to Humpty-Dumpty again.

I came away from our conversation in a bewildered state. Had the Scientist really said that? He surely had. Did he *mean* it? He certainly did, both by the words he chose and his intonation and body language. He had not denied that a conversation was mineral, and showed no sign of modifying his claim in the pause that followed. In fact he dismissed my query with a gentle wave of the hand which in Imperial China would have meant 'End of Interview; Proceed at Your Own Risk'.

How *could* a well-respected personage talk such poppycock? I was actually a little angry.

But what a gift!

First there had been the writer of that Introduction who claimed that Darwin was 'purely material' in his views, which was quite untrue; then Richard Dawkins' erroneous claims concerning Darwin's views, and his cavalier use of language and metaphor; and now here was a third party making a palpably absurd statement...

§ Please check Chapter 3 again to be sure we are progressing in proper tandem here. Meanwhile, here's a summary of RD's claims again:

- That a goldfish gives the impression of design, while an atom does not.
- That a goldfish bowl, or a car, is treatable as a biological (ie 'living') object.
- That merely 'living' is enough to produce creations, with no mention of intelligence, purpose, will, etc.
- That Charles Darwin thought that Life arose by chance, which is simply untrue, according to *Origins*.

It seemed that all three of them were so seriously locked into a common mind-set (which looked like being 'Materialism') that it did not register with them that they were speaking untruths and/or absurdities.

How had the fair art of science become reduced to such untruths and absurdities?

And what *was* the alternative to Materialism? Surely there must be a logical and *rational* alternative? If not, the only options open were either that The Church's waffle and obscurantism must be true, or, unthinkably, that there simply was no explanation at all: that the Universe, and everything in it, including Life and 'meaning' itself, was just.. accident; just... stuff... even though 'meaning' can scarcely be called 'stuff', by any stretch of Humpty-Dumpty's imagination.

But... *that* view (ie, that the Universe just happened, without cause or purpose) was precisely the Materialist point of view, was it not?... which still seemed to me to require the magic of spontaneous creation of Life from non-life, etc, etc, and which, once adopted as Truth, led to such nonsensical claims as 'everything is mineral'.

So, if Science/Materialism led to nonsense, and The Church's mumbo-jumbo was already nonsense....

Well, there absolutely *had* to be something else. Purpose, reason, logic, all exist in the Universe. They had to come from somewhere. And so did Life Mind and Consciousness. There simply *must* be a rational explanation.

Britannica helped, as did a couple of other philosophy books I stumbled across, checking out one convoluted and more-or-less incomprehensible ism after another until I bumped into one that pulled me up short: a school of thought called Idealism. Idealism, in a nutshell, claims that Mind came first in the Universe, not Matter.

§ You may feel that this is all well and good, and possibly even fairly interesting, but that I've wandered a long way from the point of trying to answer my question of why science wasn't interested in spooks. But, believe me, this is vital stuff. It's actually the crunch point: the key to finding the eventual answer. Please keep your antennae sharply tuned, and be sure that you keep testing my logic.

No prospector tripping over a four ton nugget could have been as excited as I was when I first came across this. Not only was 'naked' basic Idealism a genuine alternative to Materialism, but it seemed to be that rarest of items in the world of thought, one half of a genuine either/or choice. I couldn't believe it, and spent weeks chewing it all over, testing it and checking I had fully understood it.

§ 'Idealism' is unfortunately a confusing name. I'm going to spell it with a small 'i' for the everyday meaning of 'the condition of living by high ideals', and I'll spell it with a capital 'I' to mean 'the Hypothesis that Mind (as in 'ideas') came first in the Universe'.

Eventually, I had to admit that all my doubts in the matter were groundless. There really was a clear-cut either/or to be explored, and an *absolute* decision that could be logically arrived at. And, in fact, nothing in this whole area of enquiry can be interpreted or made any sense of until we have examined the Materialist/Idealist split. Here we go:

The Question is 'What came first in the Universe, Mind or Matter?'

EITHER: Matter/Energy (in some form) came first and somehow gave rise to non-Matter like Life Mind and Consciousness (the Hypothesis of Materialism)

OR: Mind (in some form) came first and somehow gave rise to Matter/Energy (the Hypothesis of Idealism)

Yes, it really *is* an either/or. They are absolutely contradictory in their claims. One must be right and the other must therefore be wrong. I'm afraid it's no good saying 'Well, perhaps Mind and Matter both came first, in parallel, so to speak', because that would then admit that Mind was indeed a separate factor from Matter, would it not?.. which is precisely what Materialism denies, when it claims that Matter *alone* lies behind 'everything', and thus, by definition, came *before* Mind. In other words, Materialism, by its own definition, will not allow for a parallel origination. Do you follow this? Please read this paragraph again until you are sure you see the logic of it.

Similarly, we can't say 'Well perhaps neither came first, because they are both eternal, and have no beginning', because again, that would be to admit that Mind is a separate entity from Matter, which Materialism denies.

§ You may continue to insist that perhaps Mind and Matter both originated in parallel, and Materialism is simply wrong about Matter being supreme. In this case, you must still admit that Materialism is wrong in that it insists on Matter alone coming first. You then also still have a serious problem, as a parallel origination means that both Mind and Matter must ultimately have had this origination in a Yet Higher Cause of some sort; again, anathema to Materialism.

So... It really is an either/or.. Either Materialism is correct or it is incorrect. If it is incorrect, then Idealism must be correct, in requiring Mind to be separate from Matter at the very least. One Hypothesis must be right; one

must be wrong. Which is it to be, and why? Take a deep breath... this is big stuff.

Might I ask you, dear reader, to read the next passage as calmly as possible. I realise that it may generate a fair amount of steam in some people, but there is no need for this, and steam in matters of the mind is counter-productive. Better to use the steam to make a calming cup of tea and then start again. Please just read to understand, rather than to reject or deride. No harm will come of this, I promise.

Let us ask a couple of questions, to clarify how Materialism and Idealism square up. Firstly:

'What came first in the universe?'

A Materialist will say 'The Big Bang... a ginormous explosion of Everything, and *all* of it Matter/Energy'.

An Idealist will say 'Mind'.

'What came before whatever it was that came first in the universe?'

A Materialist will say 'We don't know yet, and may never be able to know. But clearly it must be something super-material, capable of creating all the Matter/Energy in the universe'.

An Idealist will say 'Mind'.

'How can we explain the existence of Life?'

A Materialist will say 'It arose spontaneously from Matter/Energy alone'.

An Idealist will say 'Life and Mind are inseparable; they (or 'it') pre-existed Matter'.

'How can we explain the existence of Mind?'

A Materialist will say 'Mind ultimately arose spontaneously from Matter/Energy alone, via Life (see above)'.

An Idealist will say 'Mind (Mind/Life) pre-existed the material universe'.

'How can we explain the existence of Consciousness?'

A Materialist will say 'Consciousness ultimately arose spontaneously from Matter/Energy alone, via Life and Mind (see above)'.

An Idealist will say 'Consciousness is inseparable from Mind and Life, and pre-existed the material universe'.

'How can we explain the existence of Matter/Energy?'

A Materialist will say 'All Matter/Energy instantly appeared from a microscopic point in the moment of the Big Bang'.

An Idealist will say 'Life, Mind and Consciousness somehow produced all the Matter/Energy in the Universe, possibly via the mechanism of the Big Bang'.

Thankyou for your patience. I hope all the points above were clear, and that you can perceive that each ism is self-consistent in its claims.

Now then....

Where did that get me?

As I asked those questions and considered the answers to them I was struck by two consistencies:

1 Materialism keeps requiring something from nothing: Life from non-life; Mind from non-mind; and Consciousness from non-consciousness.

2 Idealism merely poses a mystery, or possibly a series of mysteries, depending upon how we relate Life, Mind and Consciousness to each other.

Time for another deep breath:

Of the two, Idealism, mystery or not, was clearly (via the requirements of logic) the more rational philosophy. Why?

Well, to require 'something arising from nothing', time after time, as required by Materialism, is simply irrational: in essence, it's an appeal to magic.

§ Just to confirm what 'something from nothing' means here: if Materialism is correct, then chemicals ('minerals'/Matter) and Energies, which do NOT contain Life, or any known 'potential-for-Life', somehow get together and produce Life from within themselves, without the involvement of any other agency whatsoever.

And I'm afraid it's no good invoking the extraordinary metamorphoses brought about by normal chemistry as an explanation, as some people do. It's true that if you mix a flammable metal (sodium) with a poisonous gas (chlorine) you get an eerie burning process leaving as a residue something you can sprinkle on your chips (salt). This is most remarkable, but it can be explained in terms of standard atomic and electron theory. The process is well-understood and infinitely repeatable.

There is NO theory, however, that can explain how abiotic (non-living) chemicals can spontaneously assemble themselves into a self-replicating living entity, even once.

To put it a little more technically, to claim that something arises from nothing flies in the face of scientific method, which insists, quite rightly, on Cause being followed by Effect, and every Effect having a Cause. Science is *built* on this requirement.

Thus lice do not self-generate by magic from dirty clothes, as was often thought in pre-scientific days, but by means of eggs laid in seams. We'll be looking into Cause and Effect a little more in a later chapter.

To maintain a Hypothesis which ignores this foundation rule of scientific method is to insult the principle of scientific investigation. Would you agree? If not, why not? Please think carefully and rationally. Bluster is not an option. Neither is throwing the book at the cat, as that would count as bluster.

§ If it's any help, Sherlock Holmes himself would be bound to agree with the logic of the analysis above; thus:

'How often have I said to you, that when you have eliminated the impossible, then whatever remains, however improbable, must be the truth?
The Materialism/Idealism split is a clear either/or decision, is it not?
Materialism is irrational, and is thus unsustainable.
Thus Idealism, like it or otherwise, must be right.
Pass me my violin please, Watson. I feel an impromptu coming on.'

It was also interesting to me that Materialism and Idealism could in principle both agree on the Big Bang Hypothesis, the difference being that for Idealism the BB was a Mechanism linking Cause (Mind) to an Effect (the Universe) (a classic example of scientific method), whereas for Materialism the BB was simply an event.

§ At a pinch you might call the Big Bang a Cause and the Universe an Effect but then you have no Mechanism. (You can't count 'expansion' as a Mechanism, as a Bang *is* an expansion).

Just as a point of academic curiosity: the difference between the two views could be neatly summarised in the Latin phrases 'Fiat lux' and 'Erat lux': 'Let there be light' and 'There was light'. As this idea occurred to me I felt a tiny shiver, as anyone who has ever read the poetry of *The Book of Genesis* will recognise. We'll be returning to this later.

Having retrieved the book and apologised to the cat, let us continue with a few thoughts on Idealism and the mystery it poses:

For a start, Idealism *does* suggest a Cause for the Universe (which Materialism does not, unless you count a spontaneous eruption out of nothing, which isn't entirely satisfactory to anybody), although it is not at all specific. It says that Mind was the cause, but does not define this mysterious 'Mind'. However, because it does not suggest a complete nuts and bolts solution does not make this an *irrational* suggestion; it is merely incomplete. 'Very incomplete', I hear you mutter, and am bound to agree with you. But 'incomplete' has never meant 'wrong'. Our understanding of

the workings of the body, ecology, physics or the cosmos itself are 'incomplete', but that does not necessarily mean that our understandings so far are 'wrong'.

Secondly, there is nothing wrong with a mystery. Light was a mystery until Newton refracted it through a prism and made it thus slightly less of a mystery;

§ Light is still 99% mysterious, however. Much work will be done on it in future decades, we may safely predict.

why some heavenly bodies seemed to go backwards and doodle about the night sky was a mystery until Copernicus investigated and explained it, much helped by Kepler and Galileo;

§ More on Copernicus in a while.

why some species thrive, while others die out was a mystery until Charles Darwin investigated and explained how Evolution works, and how body shapes come and go.

So there is no theoretical problem with Idealism offering only a mystery, or a huge bundle of mysteries. Mysteries attract intelligent and enquiring minds; and those enquiring minds are the ones that bring greater scientific understanding to the world.

No mysteries → no science → no material progress.

Idealism (in its basic, 'naked' form, as delineated above) offers no explanation for the nature of Life Mind and Consciousness, except that they are interconnected and 'came first'. This means that LMC

§ To save space I'll occasionally reduce Life Mind and Consciousness to 'LMC'.

must have existed before the world, and indeed before the entire Universe. The clear implication of this pre-existence is that LMC somehow created Matter/Energy.

Absurd! ABSURD!!! (Watch out, cat..)

But is it absurd? And why is it absurd? After all, we know from everyday life that Mind creates. We all do it every single day. We use our minds to create cakes, emails, cricket bats, cathedrals, Large Hadron Colliders,

§ Bye the bye... Nobody has yet explained to me by what principle the Large Hadron Collider can possibly simulate anything meaningful about the nature of the Biggest Bang Ever by means of the Tiniest Collision Ever. Any offers?

and of course the cars, computers, locomotives, and biomorphs that Richard Dawkins was concerned with in *The Blind Watchmaker*. Mind/Intelligence *creates*. That's what it *does*.

§ Please refer back to Chapter 3 if you would like to recall how everyday creativity operates. And again, please consider once more whether intuitive/creative/imaginative/intelligent/purposeful/persistent people might be accurately described as 'living objects'. More on the elements of Mind later.

We all know this to be true, so again, where is the problem with Idealism as a principle?

True, it goes entirely against the Hypothesis of Materialism, but as Materialism is clearly irrational (as demonstrated above), so what? Surely this is a good thing? A candle in the dark? That's how it felt to me.

It's time to pause, I think, and to confess that I felt all of the doubts that any open-minded scientist will be feeling at this point. But logic is logic and wishing things to be otherwise will not gainsay this fact.

And by logic, Materialism had shown itself to me to be untenable: it was paradoxical,

§ 'Paradoxical' meaning 'self-contradictory', as in acknowledging that chemicals do NOT contain life, while insisting that they spontaneously self-assembled into entities which could eventually self-replicate and thus be thought of as being alive in some sense. More on this soon, but meanwhile you might like to spend a moment on thinking about one of the implications of this notion: that non-living chemicals spontaneously self-assembled into living objects, and that these newly-living objects then spontaneously gave rise to Mind; these newly-mindful creatures then spontaneously gave rise to Consciousness; and these newly-conscious creatures spontaneously gave rise to Self-conscious creatures like you and me, who can use language and abstract squiggles on a page to convey meaning to each other.

Now here's the crunch... if you track this process back, all the meaning in this book and indeed in all the world, must have been somehow within those few original chemicals which accidentally bumped into each other millions of years ago. Yes.. it MUST, because there must always, by the rules of science, be a Cause for everything. Materialism claims there was nothing but Matter/Energy in the beginning. Therefore that same Matter/Energy must be the ultimate Cause of everything, throughout the whole development of the universe down to the present day, and as there is no expiry date on Causes, this must ultimately include this sentence and your own emotional reaction to it at this moment (bearing in mind the claim that ONLY Matter/Energy has ever created anything).

Furthermore, as these original chemicals are claimed to have banged into each other at random, it stands to reason that ALL those primordial chemicals must have contained

ALL meaning (as above), because otherwise the few that banged together to spontaneously produce Life (then Mind, then Consciousness, then self-Consciousness, then meaning, love, joy, etc), must have been very special chemicals indeed, being the ones that contained all the meaning (love, joy, purpose, etc) in the world for centuries to come, and there is no suggestion anywhere in science that the Big Bang or any consequent mechanical process ever produced a few special chemicals that contained meaning (or Life Mind or Consciousness, if it comes to that) in contrast to all the others.

This whole mad confection is the great Materialist paradox re-stated: that LMC arose spontaneously from Matter/Energy which on the one hand did not contain LMC, but which, on the other hand, must have contained LMC, at least in some potential form.

This barmy 'necessity' breaks the fundamental rule of logic: that something may not both be 'x' and 'not-x' at the same time. If you feel your need to brush up on your logic, I recommend *Teach Yourself Logic* by A A Luce as an elegant and readable introduction. (But you don't really need a book. That fundamental common-sense rule above will take you most places, especially as regards this book.)

and broke the accepted ground rules of scientific procedure. How could it be 'true'?

Idealism truly was the alternative to Materialism, by logic. I was thus forced to take it seriously if I was to make progress with my enquiries.

But it rankled something awful. I knew that this really was an *absolute* choice. Materialism was wrong; therefore Idealism was right. But I had a very hard time in accepting this after years of being sneered at by my all-powerful Materialist biology teacher and having been brought up inside a society that maintained a constant low-level hum of Materialism, without me having realised it was even there.

§ More on this most important element of background hum later.

The greatest problem that arose for me at this point, and will do now possibly for you, was that I could feel the hot sticky breath of religious dogma and the Inquisition at the back of my neck, and had no wish to engage with it.

§ But fear not, brave reader. There is a resolution to this. And it's logical and rational, otherwise I wouldn't be wasting my time and yours.

AND... for readers of a religious persuasion, please don't give up on me yet. I promise you that light will emerge from all this apparently 'anti-religious' carping, but it may not be exactly what you might be hoping for.

More weeks passed as I tried to make sense of Idealism without resorting to religious dogma. Clearly all religions were Idealist constructs, in that they all required Mind to come first in the Universe, but Christianity as I

understood it appealed to me only to 'believe'. This wasn't an option for me, though.. I needed to 'understand'.

The Hitler Youth had 'believed' and inflicted misery and murder upon millions; the Catholic Church regularly burned people who disagreed with them just a couple of centuries ago in 'Autos da Fé'...'Acts of (the) Faith'. And modern Islamist terrorists are driven by blind faith, and kill and maim hundreds at random, including their own brother Muslims. 'Faith' and 'belief' were not for me at any price.

§ The credo(!) of Mussolini's fascists was '*Credere, Obbedire, Combattere*' ('Believe, Obey, Fight'). Very succinct: 'Don't think, believe, and become a slave.'

§ 'Faith' is effectively 'Belief' in action, as one can have faith only in what one believes. Thus, as 'Belief' is a more fundamental entity than 'Faith', I'll be dealing only with Belief in this book.

Having said all that, I would clearly need to investigate other religions. And other philosophies. More flipping reading... the Truth must be out there somewhere...

But meanwhile, good old-fashioned mulling brought some results. The most important one concerned the vexed problem of how Mind (amalgamated somehow with Life and Consciousness) had created an entire Universe. The problems are self-evident...

The most obvious problem might be stated something like this: 'How *could* Mind make a Universe? I've got a Mind and I couldn't make a Universe. Therefore it's all rubbish.'

This is not a logical response to the issue, though, is it? Just think: ***IF*** Mind did indeed create a Universe, then we are dealing here with a SuperMind of some sort. How ridiculous is that?

Well... not at all, I would say. We all know that human intelligence varies enormously, from Plato to Pluto, so to speak. And speaking of Pluto, so does animal intelligence. Man is smarter than a chimp, who is smarter than a dog (and all dogs vary), who is smarter than a chicken (ditto; I know this), who is smarter than a woodlouse, who presumably is smarter than a tapeworm, who presumably is smarter than a bacterium; who, one might presume, is smarter than a virus.

The point is: we already have plenty of evidence of a *huge* scale of Intelligence in our everyday world. At the one end we have the Einsteins; somewhere in the middle we have Einstein's dog, who, smart though he might be, will never understand why The Boss spends hours scratching about with bits of chalk instead of chucking him a stick;

§ By the bye.. Rico the sheepdog can fetch 200 items by name, as tested by the Max Planck Institute for Evolutionary Anthropology, no less. His associate 'Betsy' can fetch 320 objects by name, or by being shown a copy, or simply by looking at a picture of the required object.... now that's smart. I'm sure there must be people who can't do that... Alex the African Grey parrot could count to six, could identify fifty different objects and seven colours, and had a vocabulary of 150 words.

and at the lower end of the scale we have molluscs and insects, who, we might be pretty sure, have no concept of what life is like for a human being at all, just as we have little real idea of what it is like to *be* a beetle. Further down the scale, we can only admit to complete ignorance of the inner world of an amoeba. But all these creatures exhibit at least traces of intelligence in that spiders, for example, are smart enough to not run into ponds, and the extremely humble amoeba displays evidence of primitive choice or decision (see <http://www.newscientist.com/article/dn15068>).

So... just as we have no problem with a *diminishing* scale of Intelligence, all the way down to beings of unknowable dimness... thus we have no *logical* reason to deny the possibility of an *increasing* scale of Intelligence that would consider us as mere bacteria by their own intellectual standards.

§ A Materialist certainly would have a hard time in accepting that this is a logical option, as in his worldview, Life Mind and Consciousness all arose spontaneously from the original Matter/Energy of the Big Bang; thus Man is self-evidently the highest form of Life and thus the highest form of Mind and Consciousness on the planet or possibly in the Universe, and any sort of non-Material SuperMind capable of creating a universe is out of the question. But Materialism is irrational and thus untrustworthy, is it not? Please check back again if you are still having trouble accepting this. I realise it might be a total bombshell, and needs time to come to terms with. It took me many months to accept it, and I had worked up to it gradually, unlike yourself, who may well have been slung in at the deep end. As a matter of fact, I still have moments when I can't believe it and need to re-think it through. But every time, the first result is confirmed: Materialism is irrational, and for the sake of us all, not just of science, it must be dropped. More on the disastrous social effects of Materialism in Chapter 27.

What's more, I think we are pretty safe in assuming that molluscs and bacteria and so on are entirely unaware even of human existence, never mind our Mind power and abilities. It is logically possible that we humans are just as unaware of higher levels of Intelligence.

But, you might say, surely we *would* be somehow aware of these SuperMinds if they exist? But would we? Is the *E. coli* who lives and moves and has his being in your own personal gut aware of *you*? Doubtful. But perhaps more to the point, we can only become aware of things if we are looking in the right place. Materialist-Science even refuses to look at ghosts, never mind the huge realm of other paranormal Anomalies whose

study might open up all sorts of doors, not least in the realms of communication, healing and psychology. Obviously, we'll be looking into this a little more later on.

Why this refusal to even look? It seems to me that the only thing blocking us in this is our arrogance in thinking that we *must* be the smartest thing in the Universe because we can make enough atom bombs to kill everyone on the planet a dozen times over, which chimps and molluscs can't. We'll be coming back to this, too.

Please note that I am not claiming that SuperMinds *are* real and true, as I have no personal evidence of such. I am merely saying that, by logic, we cannot deny that they *might* be real and true, and that perhaps we should begin looking.

§ Although you will have noticed that basic Idealism definitely requires a SuperMind right from the start, as in Darwin's 'Creator'. But Evidence is required as well as a Hypothesis...

As Materialism is demonstrably wrong, its only alternative (Idealism) must be right. Idealism claims that Mind came first in the Universe, so it seems to me that we really must accept as a logical possibility/necessity that SuperMinds actually exist, and that maybe one (or more?) of them is entirely capable of knocking up an entire Universe, and maybe even doing such in just six of your Man Days, so to speak.

§ But there is an obvious problem here in that Days as such did not exist at the time of the alleged Creation, as a Day is an intellectual construct dependent upon an Earth rotating on its axis. No Earth, no Day. So maybe we should propose a SuperMind 'Day' of, say a billion years, give or take. We might even like to consider the possibility that 'Time' itself is a man-made construct, in which case 'Day' has no meaning at all. (More on 'Time' in Chapter 23.)

It would seem to me that the 'Days' in the *Genesis* story refer essentially to a sequence, with the timing expressed in terms suitable for a non-intellectual tribal people to get the feel of. They could get a handle on 'a day' but not on 'an aeon', or a 'nano-second', say. In fact, the original Hebrew word 'yom' can mean 'a period of indeterminate length'.

All of this is just logical speculation. Do I mean 'speculation'? It feels more like 'ramification'. We'll see... so how about some Evidence?

May there be any Evidence for SuperMinds? Actually, I think there might be, and we'll be coming to this later. However, it might not be what you are expecting.

Meanwhile, what about actual Evidence for the Materialist Hypothesis on the origination of Life? The scientific process requires both a Hypothesis and Evidence. Was there any Evidence? What would count as Evidence,

anyway? Surely there must be some, because my palaeontologist friend had assured me that 'making life was easy'. But I dunno.... If the Hypothesis is fatally flawed by its own internal (lack of) logic, I couldn't see how there could possibly be any irrefutable evidence of it being 'true'.

But, maybe I'd got it wrong, somehow... maybe my logic had gone awry somewhere, despite my endless ruminations and stand-up, out-loud, dialogues, pacing up and down the kitchen, asking rhetorical questions of a willing but increasingly bewildered dog.

Time for more delving... if I could find *real* evidence that Life had been created from non-life then I was going to have to go back and re-think everything I'd thought through so far. Humble pie would be in the offing. OK, so be it. Truth was what mattered...

And perhaps en route I might discover why there was such an outright rejection of Idealism by the Materialist/Scientific world. That still rankled.

Chapter 6

So Where's the Evidence...?

The cure for a fallacious argument is a better argument,
not the suppression of ideas
Carl Sagan

One of the books I'd come across in Oxfam was an ex-library copy of Isaac Asimov's *A Short History of Biology*, and better still, his two volume *Guide to Science*. They were all twenty years or more old, but I knew Asimov to be a clear thinker and writer, and enjoyed reading the books. By the end, I felt I now had a pretty good overview of the history of science and its big themes. But had I found any evidence that Life had ever been manufactured by man, which would have been cast-iron Evidence for the Hypothesis of Materialism? No.

Over the following months I delved into several other books, but still found no Evidence. The most modern book I could find was *An Encyclopedia of Evolution* by Richard Milner (1990), which has a foreword by Stephen Jay Gould, an American scientific essayist and pillar of Materialism. Under the entry '*Life, Origin of*' RM says: 'Scientists cannot agree on a single formal definition of life..', which gave me pause for thought. If you literally didn't know what it was you were looking for, how could you know when you'd found it, never mind how could you know how to go about synthesising it?

§ The latest *Encyclopedia Britannica* also states that there is no generally accepted definition of life. *Wikipedia* (2011) says much the same thing. We are still none the wiser, it seems.

A word of caution here: there are many lists of things *associated* with Life, like movement, metabolism, reproduction, reacting to stimuli, and so forth, but these do not describe Life itself, merely observed behaviours of things agreed to be living. It isn't even clear what should be on the list. As a grotesque example, is a person in a coma and on a ventilator 'alive'? After all, they don't move, react to stimuli, or reproduce. Common sense says that they are, nevertheless, alive, even if they don't strictly fit the list. But what about a virus, which can't propel itself, doesn't metabolise, doesn't appear to react to stimuli, and can only reproduce after invading a living cell and hi-jacking the cell's facilities? Alive?

(Incidentally, if all the viruses in the world were laid end to end they would form a line 200 million light years long. Just so you know.)

§ Curiously, Mr Milner's excellent book does not have an entry on *Materialism*. I found that very surprising.

The 1950's was a time of great scientific optimism. Jet propulsion... nuclear power (which would, we were assured, produce electricity 'too cheap to meter')... new vaccines... improved fertilisers and pesticides... amazing new plastics... science was on a roll. All that remained before Man could finally triumph over Nature was the workaday task of assembling Life from its component molecules. How hard could it be?

Stanley Miller carried out some famous experiments in 1952 which tried to synthesise a living molecule out of what were thought to have been the raw materials available, millions of years ago, in pre-life times. These famous 'Primordial Soup' experiments were symbolic of the optimism of the times. Nobody doubted that the job would be done.

§ Miller sealed samples of water, ammonia, hydrogen and methane inside a series of interconnected tubes and flasks. The water was warmed to encourage evaporation, and then sparks mimicking lightning were fired into the 'atmosphere'. Then the system was cooled down to allow condensation, and the process was repeated.

After a week of continuous operation, Miller found that some 10% of the carbon within the system was now in the form of organic compounds.

Thus came a feeling of certainty that the next step would surely be a living entity. Who could doubt it?

But it wasn't done. Miller, and the numerous other people who followed in his footsteps, performing countless thousands of other experiments in many different lands and laboratories have *never* assembled Life or a living object, or a 'replicating molecule' which would have been seen as an acceptable first step. No matter how ingeniously they revised their theories about what the primordial atmosphere might have been like, and what proportions chemicals might have been mixed in, and what temperatures and lighting conditions might have been like, Life stubbornly refused to appear in the apparatus.

Right from the start, they produced chemicals 'associated with life', sometimes quite complicated chemicals, but *no* Life.

§ The most intriguing chemicals Miller produced were a number of amino acids which are found in proteins in living cells. However, these synthesised chemical acids are no more 'proof' of Life being the next step than a million monkeys randomly typing three small words amidst miles of gibberish is proof that *Hamlet* will be their next step.

And interestingly.... the carbon in these compounds all came from the methane included in the mix. However, methane is already an organic compound, found in natural gas. Natural gas, like coal and oil, is the product of biological processes of decomposition of the remains of once-living entities. In other words, 'natural' methane seems to be the product of Life already existing, although one of the moons of Saturn seems to have plenty of methane which seems to be abiotically formed. So who knows?

Richard Milner, in his *Encyclopedia*, calls this episode 'decades of persistent failure to 'create life''.

As the Soup Hypothesis failed to produce the goods, other hypotheses for how Life self-generated itself out of non-life arrived.

Someone suggested it might have happened among layers of clay; others have suggested that the super-heated vents called 'black smokers', found in the ocean depths, might have provided suitable circumstances. There is no evidence for either of these hypotheses, and of course, they both have the same problem that the Primordial Soup approach has: by what *theoretical principle* might Life emerge spontaneously from non-life?

This lack of evidence confirmed my 'logic discovery' that Materialism was irrational, in that if the theory was wrong there could not possibly be proper evidence to support it. So, I had been right. No paradox discovered. Sigh of relief: logic worked. How could I ever have doubted it?

§ This claim, that there is actually no evidence that Life has ever been synthesised will come as a shock to many readers, who like most people, myself included, have had a vague background feeling that it had probably all been done and dusted long ago, and was no longer even worthy of comment. My palaeontologist friend was obviously so confident of this that he transmuted this vague background feeling into 'fact' when he claimed that 'making life was easy'.

Well, I'm sorry to bear such shocking news, but fact is fact.

If you find it impossible to believe, then I urge you to do as I did, and actually check. You will find that there is no shortage of hugely optimistic literature on the subject, which assures us that it's only a matter of time, etc etc... but NO evidence. NO evidence. The best you might hope to find are claims that 'it must have happened, because well, here we are!', which is as irrational an argument as you are ever likely to come across, on a par with my friend's claim that whistling *Send in the Clowns* for three minutes every Tuesday is successfully keeping polar bears out of Wolverhampton.

You will find lots of experiments that have produced 'interesting results'.. but nobody has ever synthesised Life from raw chemicals.

You might wish to reflect for a moment on how you (and I, and virtually everyone else) have come to be misled in this matter.

§ Curiously, some Materialists have claimed that the reason Life has not been synthesised in any of our Soup experiments, is that the Laws of Nature must have changed during the aeons between the original self-assembling synthesis of Life from no-life, and today, when chemicals and energies stubbornly refuse to self-assemble into living things.

Is there any evidence for this? Not that I know of. And I would also like to know by what Law might the other Laws be allowed to wander.

Presumably the Laws must have wandered more than once, as a Big Bang without a Cause appears to break at least the first of the current Laws of Thermodynamics.

And at the end of it all, we still have the problem of how non-life can spontaneously assemble itself into something greater than itself.

This was the tipping point of decision for me:

Irrational theory + No evidence = (Non)scientific non-sense

That's the way science works. The Hypothesis of Materialism was simply WRONG.

I realised that I must now make the absolute decision in favour of Idealism, whether I liked it or not. Materialism must be abandoned if science (not to mention the rest of human endeavour) is to make further progress in its attempts to understand Life, Cosmology and the Point of it All.

When this penny finally dropped, I was conscious of being in a state of shock, and not a little alarmed. I'd definitely wandered out of my safety zone.

And I was very strongly aware of the tragedy that science had adopted Materialism as a Truth: and had thus adopted the one thing science should never have: a dogma. What was worse, this dogma was not debatable, but plain WRONG; therefore the whole of Science was barking up the wrong tree. Gulp...

May I take pause here to make a couple of points? First of all, let me reassure you, dear reader, that I am *not* anti-science. Absolutely not. But I am against *bad* science, as I am sure you are too.

§ Why does it matter that Materialism is wrong? First of all, it immediately explains why Science has no interest in spooks (as a definitely non-material entity is inconceivable to it), but there is far far more to it. More later.

Logic had showed me, after weeks of trying to prove otherwise, that Materialism was simply irrational. The point is.. have I brought you along with me?

If so, the rest of the book should be of great interest to you. After what might have been a period of astonishment and even shock (as it was for me), light will emerge... I promise. There *is* a rational resolution to all this. You might also be anxious that accepting the necessity for Idealism will mean that the well-respected Theory of Evolution, say, must be abandoned.

Absolutely not, although you may wish to re-consider one associated element of it (of which, more later).

In fact, I can think of no scientific Theory that is in any way threatened by substituting Naked Idealism for the Emperor's New Clothes of Materialism, and I can think of a number of Theories that might actually be immediately enhanced, by enabling previously 'forbidden' lines of enquiry, or other possible interpretations of data. Again, more later.

§ Here are just a few of these theories or problems. You can no doubt add more: Bilateralism and cell differentiation in embryology; origin of pattern in Nature; even quantum multiverses and collapsing waves; and a number of other mysteries that might be rationally examined, not least the mysteries of psychosomatic illness; self-healing; hypnosis; the placebo effect... and spooks, of course. More on some of these points later.

More broadly, abandoning Materialism does *not* (repeat: **NOT**) mean automatically returning to medieval superstition, or unreasoned Creationism, or blind Fundamentalism, as many scientists fear. There *is* a rational, reasonable alternative, even to the obscurantism and weirdness of The Church. All will become clear, if I can explain it well enough. Please stay with me.

If I have not yet persuaded you via the path of logic and lack-of-evidence, then I urge you, if you are seriously interested in rational thinking rather than just chanting a creed and being Right, to please re-read the previous chapters, with a view to *finding fault with my logic at specific points*. If you can find just one *specific* fault in my logic then my whole case falls apart. But please be sure that it is the logic you are finding fault with, and not the notion that I am insulting the great name of science or somesuch.

§ And while you're at it, please don't put words into my mouth, such as 'Oh.. this is just *x-ism* or *y-ism* in disguise', or 'He's going to tell us next that Jesus wants me for a sunbeam'. Please.. just take me at my word, quite literally, and add no assumptions of your own about what I am about to 'spring'. And please don't fall into the pit of thinking you've negated one point by raising another quite separate issue. Just stick with the issue at hand.

I have no hidden agenda. Logic is my only guide, which I'm sure is as you would wish it to be.

Believe me, I have no wish at all to insult anyone or anything, but I do insist that truth and reason, where it may be discovered, should be accepted, explained, and broadcast, preferably in a book with a few jokes in.

If you can find no *specific* flaw in my logic then I suggest you should, in the name of reason, take a deep breath and do the rational thing: accept that logic is logic, and that therefore Materialism should be abandoned forthwith.

Good luck, either way! And thankyou for following me so far. And if you decide to soldier on with me, I promise interesting times.

§ I absolutely do understand how hard all this will be for some people, especially for people whose livelihood, and even more, whose reputation hangs on defending a status quo: in this case, Materialism. When I first wrote something about this business, in *Scenes from a Smallholding*, I sent my drafts to a friend, (a 'non-practising Materialist', much as some people are 'non-practising C of E') asking him to please find flaws in my logic if he could, as I had been unable to find any myself despite endless hours of trying. After a brief exchange of emails, Charlie said that no, he could not find any fault in my logic. 'So!' I said... 'you must thus abandon Materialism in favour of its only logical alternative, which is some form of basic Idealism.' 'Well, yes...' Charlie responded, 'but I prefer to sit on the fence a bit longer.' Many others will feel the same way, I know.

But here's the point: there *is* no fence. Is there? It's a clear either/or, yes? *No* fence. If you can't remember exactly why, please go back to Chapter 5 and peruse the choice again. If you still insist on sitting on a non-existent fence, please bear in mind that you are sitting on an illusion. Could be painful..

Nevertheless, all this will be too much of a shock to the mental habit of decades for a lot of people. Some will never be able to face it, and will just fulminate in inner fury or write angry and scornful letters and blogs. Many *will* face the decision and its implications, however, especially among the inquisitive and undogmatised young. Slowly Materialism will be ousted. Give it 50 years.

I do realise that I have laboured my points very heavily indeed in the last couple of chapters, and used *far* too many *italics*. I apologise for this to a degree, but like it or not, extraordinary claims need to be hammered out in great detail, and the claim that Science's invisible but near-universal dogma is plain wrong, must be seen as extraordinary, I think.

§ Yes...'dogma'. That is assuredly what Materialism has become to Science, and science should never have a dogma. Any bold researcher who would like to pursue experiments in something like telepathy, or homeopathy, or anything else that goes against the unquestionable beliefs of The Dogma, will find funding very hard to come by (although I do detect a slight change of late, and can think of at least two ongoing experiments into Near Death Experiences).

One quiet polite explanation of an unexpected point will not do. It will be overlooked. Even two or three mentions may not do, as human nature being what it is, people are disinclined to change their minds about anything they think they are Right about, especially if they are backed up by some sort of powerful Establishment. And people frequently tend to read what they *think* is there, rather than what actually *is* there.

§ In the case of Materialism the Establishment comprises Science, almost all of the media, and most of what may be called 'educated society': three super-heavyweights, each as nimble to the call for a fundamental change in direction as a supertanker in a canal.

To take a hammer to the very foundation stone of modern Science verges on sacrilege (a carefully chosen word; more later) and will be instantly rejected by many. However, I hope that by repeating my points in slightly differing ways, none of which can be automatically rejected by logical means... well, I hope that even the most hard-wired Materialist might agree to see the point. Thankyou for your patience.

So.. emerging from my state of shock, I found yet more questions queuing up for my attention. Things such as:

- Why had the Miller experiments been done at all?
- And the new Big One: how had Science come to adopt a dogma? And such a duff one, at that?
- And, of course... how had it come to pass that a smart man like my palaeontologist friend had assured me that 'making life was easy'? He was not an ignorant clown; he was a thoughtful academic who had passed through the full rigours of a scientific university course. How had he come to make such a woefully and totally wrong assertion?

The answer to the first question is interesting, to me at least.

The story seems to have begun in the 1920's with a Russian called Oparin and an Englishman called Haldane, both steadfast Materialists, who saw no reason why ordinary chemicals could not have spontaneously self-assembled in the Primordial Soup, given millions of years, until Life emerged. Oparin's book, *The Origin of Life* is still a lively and stimulating read (available from www.valencia.edu/~orilife) although, as with all his Materialist colleagues, including Mr Dawkins of course, you need to be on your guard for the sudden 'sleight of words' in which 'structure' or 'pattern' or 'complexity' or 'design!' suddenly appear from nowhere, without due Cause.

The reason I'm mentioning Oparin is that I came across an article he wrote in the 1970's in some sort of biology year book in Carmarthen library. In it, (and I paraphrase, because the book disappeared from the library so I was unable to get the verbatim quote, years later) he said that we've been trying to synthesise life from chemicals for fifty years, with no success, so maybe

it was time to call a halt. And when the originator says enough is enough, maybe we should have listened, and begun a re-think thirty years ago. But that doesn't seem to have happened. Materialism still reigns, to the bafflement of many, and Mr Dawkins and his colleagues are still convinced that Life created itself spontaneously from abiotic chemicals and energies, and absolutely nothing more.

§ *Abiotic*: 'devoid of life' *Concise Oxford Dictionary*.

How these experiments were carried out still interests me, not so much from the technical side but from the theoretical side. Huge assumptions were made about what the Primordial Soup may have been like, based upon the best information of the day. Thus all the researchers had to work on were optimistic guesses. Fair enough. But as the expected results failed to arrive, they must have fiddled the components a bit here, and tweaked a bit there, to encourage the process along, so to speak. After all, they were not troubled by doubt. But... despite all the help they could offer to the experiments, Life remained unsynthesised. The rabbit stubbornly refused to appear in the hat.

§ And if you're still not persuaded, even after several re-reads of the logical case I'm putting for the abandonment of Materialism, you could try asking yourself 'Which chemical precisely is it that knows how to read a book?' Or do they all know? Because knowing how to read must come from somewhere, and for a Materialist, it can only be from chemicals (ie, Matter/Energy).

§ Since writing this chapter I have become aware of the International Association for the Study of the Origins of Life (ISSOL).

For forty years ISSOL has been trying to find what Life is and where it came from, but with no success.

ISSOL has recently begun to widen its search into outer space, presumably as a tacit admission that the origins of Life are unlikely to be found on Earth.. the only place we know Life exists. Funny old world...

Chapter 7

DNA is Served

We have found the secret of life!

Francis Crick

Nobel prize 1962 for discovery of the structure of DNA

I beseech you in the bowels of Christ, think it possible you may be mistaken

Oliver Cromwell

You may perhaps be wondering why DNA has not yet made an appearance in this story. After all, isn't it 'the secret of life', as many journalists (and others) have called it? Surely the key to all these problems of origination lies in DNA?

Well no, I'm afraid not. First of all, let's be clear... DNA is a chemical, and chemicals are not alive, by definition. Nobody disputes this. Put a strand of DNA on a plate, and it just stays there until it dries up and blows away or is licked up by the cat. Put huge piles of DNA on a billion plates for a billion years and it still just lies there. How could it do otherwise? It's just a chemical. Put it into water and what do you get? A wet chemical. Mix it with other chemicals or chop it about and what do you get? Mixed chemicals or chopped-about chemicals. No more.

Given this, how precisely, might DNA have ever been called 'the secret of life'?

To answer this we need to go back to the 1950's again, and the discovery of the famous double-helix, following the investigations of a couple of dedicated Materialists called Crick and Watson.

§ And also upon the work of Rosalind Franklin, whose contribution to the final resolution the other two failed to acknowledge when nominated for the Nobel prize. Science, I discovered sadly, is not always the tale of co-operative and high-minded dedication to truth that I had imagined it to be. There can be a huge amount of rank ambition and ego involved, too. Also outright deception and cheating. Perhaps the most spectacular recent case would be that of the Korean 'king of cloning', Woo Suk Hwang, who quite deliberately manufactured evidence to support his own claim to having created the world's first cloned human embryo. All lies.

People had already known something of the powers and role of DNA, but C&W provided the crucial twisted-ladder structure which made sense of the whole thing in terms of Mechanism.

Since this discovery, enormous amounts of time and money have been poured into DNA research and again, as with the Primordial Soup experiments, simple-mechanical expectations have been dashed. Surely we were going to find a Gene for Intelligence and a Gene for Criminality and so forth? No... sorry. No such things exists. The more people investigate, the more complex the picture becomes. Genes in isolation might explain your hair colour, but even something as apparently simple as the shape of your nose requires the involvement of multiple genes.

So what to genes *do*, precisely?

Ultimately, all genes do is to provide a template from which specific new chemicals ('proteins') can be synthesised to construct or repair the cells of the physical body.

§ A human body requires an astonishing number of different proteins, perhaps up to a million, although nobody is absolutely sure. Each is of a particular complexity and shape, and each is dedicated to a particular purpose, or sometimes several purposes.

A gene is a physical thing used for physical processes, and serves as the first physical link in a chain which leads to the fabrication of a specific chemical which is then slotted into its correct position in an already existing, or growing pattern. Anything not strictly physical remains elusive in terms of genetic coding.

And, of course, we have the constant background problem of a gene being just a length of DNA, which is in itself, just a chemical. Thus a gene is a chemical. The problem is how, in principle, might an unintelligent chemical contain within itself a psychological aptitude, like Criminality or Intelligence?

§ If you've followed me so far, you will agree that Materialism will have a very hard time answering this theoretical question: it's essentially the same issue of 'something from nothing' again.

It is because of the key role that DNA plays in the physical repair and reconstruction of our bodies, and in the inheritance of physical attributes as the embryo develops, that it was called the 'secret of life' and similar nonsense, because, in a Materialist's world, the Matter in our bodies generates all that we are, so the 'secret of life' must lie within our bodies...

which are all chemical; thus DNA, being a clearly important chemical, was thought worthy of the title. It's still just a chemical.

Who originally called DNA 'the secret of life'? Francis Crick I think. Such a dramatic phrase was immediately pounced on by the press and thus became 'truth' for most of the populus. Other scientists did not stampede to correct this false impression that journalists were unleashing on the world: that Science had indeed unlocked the Secret of Life: that Man had at last triumphed over Nature (and 'God', of course). Mr Crick called his book *Life Itself*, for example: no doubts there.

Why did Scientists even half-believe that purely chemical DNA was the Secret of Life? Sorry to repeat myself, but it's because they are Materialists... for whom The Body (being composed of Matter/Energy) is the source of all our faculties. Well, they must believe this, mustn't they? If they believe 'everything is mineral', they are bound to believe this. I've heard several Scientists on television, and read others in newspapers, quite seriously claim that ideas are caused by brain activity. In other words, they are claiming that detectable processes in the brain, such as chemical reactions or electric currents, are actually generating thoughts from within their own being (it must be from within their own electro-chemical being as there can be no outside agency for a Materialist, remember?) Thus, we are asked to believe that the pulse that gives rise to a trace on an ECG is not something 'associated with a thought', or 'a result of a thought', but the *originator* of the thought; or *is the self-generating thought itself*.

§ To consider that an electrical pulse 'is a thought' is directly comparable to thinking that a television signal, 'is a picture', which it is not. A tv signal is a transmission of a deconstructed picture, intelligently encoded, for a purpose, which is intended to be intelligently decoded at its point of destination, again, for a purpose. Intelligence.. purpose.. we can't get away from it. A Materialist can not admit of an intelligent purpose as an outside agency; hence brain chemicals and electricity must for him be the exclusive formative agents of thoughts, absurd paradoxes notwithstanding. An Idealist, on the other hand, will admit of an intelligent source for the ideas that precede the brain waves.

But why, one wonders, might a non-material thought come to be encoded as an ECG trace? How does Mind relate to Body? Might Idealism come up with any clues apart from admitting the need for an intelligent source of some sort? I was all agog...

According to this Materialist scenario, electricity either is, or produces from within itself, (which amounts to the same thing) not just one thought, but all the various and amazing and *original* thoughts that everyone has ever had in the history of the world. This presumably must mean that all electricity contains all thoughts, as it's very hard to see how just the right bit of it popped up into my mind rather than yours, and on this particular

Friday rather than twenty years ago, specifically to create my own special thoughts (and memories, of course) just for me. And presumably there must be numerous different sorts of electricity to account for all my varied emotions, and my will, and sense of purpose, and imagination, and so on and so on... For all my human faculties in other words. And I guess the electricity must be of all sorts of strengths or qualities to account for all the Plutos and relatively few Platos.

§ It might be useful here to recall how you got on earlier with trying to define 'I', because if electricity is providing my thoughts for me.. then who is this 'me' or 'I'? Or is the 'I' merely an illusion brought about by electricity contemplating itself? If you can find a few spare minutes, I can recommend spending them on this one: "Who am 'I'?"

By logic, this can only mean that as it can think, all electricity must be alive, and being thoughtful, can thus create cathedrals and so forth, unless brain electricity is of a special creative sort, different in kind from the stuff that makes the fridge gurgle, and I've never heard anyone suggest this. So if electricity is smart enough to create thoughts for us, presumably it is capable of many other marvels. Perhaps we should worship it.

Yet again, once we ditch Materialism as the non-sense it is, we can safely ditch such bizarre ideas as electricity and/or chemical brains being or creating thoughts.

§ One wonders what these 'thoughtful-electricity' Materialists make of Dr Eleanor McGuire's famous study of London cab-drivers in 2000, in which she showed that the area of the brain associated with mapping and navigation (the hippocampus) increased in size as the drivers learned more and more of 'the knowledge' of London's streets and routes. Idealism says that Man's intentions, thoughts, and actions caused the hippocampus to adapt to its owner's requirements. Materialism claims, presumably, that the hippocampus grew first (for no apparent reason) and the electricity in it then created thoughts and memories of the mental maps that the drivers needed without any input on his part. Humpty-Dumpty sat on a wall... buzzing quietly.

Another shock-in-waiting in the early days of DNA research was that everyone assumed that the more advanced the life-form, the more complex would be its genome.

§ *Genome*: the name for the entire length of DNA specific to a particular organism. Every one of your body's roughly 100 trillion or ten quadrillion cells (that's between 100,000,000,000,000 and 10,000,000,000,000,000 of the little blighters, depending on which estimate you prefer) contains a copy of your personal and unique DNA-strand, each one made up of some three billion chemical units. Each strand is about 75mm in length, but is somehow coiled and supercoiled to fit within the cell nucleus, which is about 1/500th of a millimetre across. This represents a

data storage rate some 100,000,000,000,000 times denser than the best current computer storage systems. Pretty neat for an allegedly random occurrence.

If all the DNA strands in your body were to be uncoiled and laid end to end, they would stretch to the moon and back 8,000 times, and each strand contains more information than all twenty-eight volumes of my *Encyclopedia Britannica*.

But it turned out not to be so. For example, the humble guinea pig would seem to have a larger genome than humans; and *Trichomonas vaginalis*, a parasitic protozoan which causes something called Trichomoniasis in ladies, which I don't wish to find out anything more about, has an estimated 59,681 genes, as opposed to the human count of 20-25,000. Quite why a tiny pathogen should have twice as many genes than the host it infests is unclear to me.

§ What on earth are all these genes for in a tiny pathogen, if a vastly more complex entity like a human can get by very well with less than half as many?

And how do a mere 25,000 human gene-units lay out the plan for an embryo and its entire placental support system intricately linked to the mother host, then construct all the hundreds of trillions of cells, all of the right type and in the right order, making muscle and bone and lungs and heart etc etc... and then supervise and create the wiring up of the hundred thousand million neurons in the brain which dictate or allow a person's enormous range of mental capacities, never mind the forty miles of nerve strings and 60,000 miles of blood vessels, and inter-locking and harmonised endocrine and metabolic systems and so on and so forth.... all at once?

A computer programmer would want to plot out an algorithm in minute detail to methodically specify and sequence all the processes that were needed... but he would be stumped by even a routine biological process. How, for example, would he devise a schema for an automated system which creates our 25 trillion red blood cells (each containing hundreds of billions of precisely placed atoms) at the rate of 2.5 million *per second*? (And he would also need to add to his program a parallel procedure for disassembling and disposing of 2.5 million worn out red blood cells per second, thus keeping the system in balance.) Twenty-five thousand 'clickable' units is clearly nothing like enough to set up and run even such a routine system, never mind building a highly complex entity like a liver from scratch, or the astonishing procedure for making an entire new body in a custom-built womb.

Then add to all this the astonishing fact that 98% of human DNA does not code for a building-protein. This 98% was originally (and rather arrogantly, I would suggest) called 'junk DNA'. Now it is being found that it does have a purpose after all, being involved somehow in switching genes on and off. No doubt more purposes will be admitted in due course.

If you are not by now either lost in wonder or completely gobsmacked and bewildered by some of these findings, then there is something wrong with you, I suggest, and you should immediately seek medical advice or at least a darkened room. Meanwhile you could do a lot worse than to read *Why Us?* by Dr James Le Fanu for a fascinating and eminently readable exploration of this extremely challenging issue of what genes do, don't do, and can't do.

And you might like to take a look at a book on embryology, and ponder a while on the quite incredible number of precisely organised processes that go into the making of a new being, and all without any effort on the part of the mother. Who or what, any sane person must wonder, is in charge of this galactic-scale of organisation? It is unlikely to be a sheer accident as a Materialist must ultimately claim, if only because Materialism has been shown to be riddled with paradox and thus is not to be trusted.

Whatever, there was clearly much more to genes than the simple material-mechanical one-to-one equivalence that the original researchers had expected.

What's more, it soon became apparent that the fact that all creatures share the DNA principle actually meant that all creatures actually share huge chunks of the same DNA code. For example, you and I seem to share some 50% of our Super-Duper *Homo sapiens* genetic code with a banana; and, good news for Welshmen, about 35% with a daffodil.

§ Tiny it may be, but the humble fruit fly needs 13,601 genes: half as many as a human. And, incredibly, it shares two thirds of these genes with us, apparently. A coarse little carp has 98 chromosomes (a particular assembly of genes). Humans have only 46.

What does all this mean? First of all, it's a little bit embarrassing for The Master Species, wouldn't you say?

Arithmetically, it would appear that the extra 50% human-only genes that a banana is not privy to, are the genes which are responsible for all the attributes which we do not share with a banana. I can think of quite a lot. Do these extra 50% contain all our potential for Mind and Consciousness, as well as all the other more obvious differences, like body-shape and pigmentation? Presumably so, although nobody seems to have found such specific genes.

If *not...* then maybe, if no absolute line can be drawn, we should have to admit the extraordinary possibility that bananas and daffs have some sort of Intelligence... and maybe Consciousness? Who knows? Experimenters with polygraph lie detectors claim that tomatoes feel something akin to pain. A little more on the extraordinary findings of Cleve Backster later.

§ Guess what? It seems we have less than half as many genes as a rice plant, and wheat has more genes than we do, too. Make of all this what you will. What is certain is that a simple mechanistic approach of 'one gene does one thing' is dead in the water.

§ A cartoon: a daffodil and Einstein, side by side. Under each is an identical chemical schema of a gene. Under one is the caption 'A very dim chemical-gene', and under the other 'A very bright chemical-gene. Compare and contrast'.

So again... what *are* genes? It's still a great mystery how chemical genes relate to the non-chemical thoughts, emotions, aspirations, and all the other 1001 non-physical qualities that people experience, and which make people people, rather than corpses or chemical assemblages. Clearly genes are involved in bodily processes, and heredity, and in some non-physical processes too (despite the mind-boggling problem of how a *chemical* can possibly relate to a *thought* or an aptitude, and so on, even given the logical requirement that Life, Mind and Consciousness must be in the saddle, rather than mineral, abiotic Matter), but it is a highly complex and baffling business, whichever way you look at it.

For example, we share some 98% of our ~25,000 genes with chimps. 2% of 25,000 = 500. Thus these additional 500 genes, looking at it mechanistically, must presumably somehow account for all the differences twixt Plato and Pongo.

§ Although we are superficially close to a chimp, there are actually thousands of differences in body shape, each requiring thousands of modifications to cell, tissue, organs, etc; and more thousands of differences in the brain structure, each requiring... need I go on? How many gene-units might be needed just to organise the 'hardware' in the brain that might allow humans to have abstract thought; speech; endless creativity; enormous memory; complex evaluative judgements; and so on and so on...? The number apparently available is just 500. Again, make of that what you will.

And after all those enormous puzzles, the key point is that DNA can *only* operate within an already living cell. Once again:

*DNA can do its stuff **only** within an already living cell.*

In other words, it is most definitely NOT *Life Itself*, but some sort of tool, a former or blueprint, used within an already living entity, whose duty is to repair the fabric of the moment, or to pass on physical (and other?) characteristics to the next generation.

§ AND... If one removes the nucleus from a cell, thus taking out all the DNA from the cell, the cell continues to behave precisely as before, except that it can't replicate. Thus the genes can't even be in control of the cell's day-to-day behaviour, as is normally assumed.

If we admit that genes are only chemicals, with no power of operation outside of a living cell, then we may sensibly suggest that it is *the cell* that determines which coding genes are turned on and off, somehow using other, 'junk' genes in the process... and thus requiring an unknown number of levels of power and control. What are these powers, precisely? Where

do they reside? What controls and coordinates them? A Materialist can only insist that these powers and controls simply don't exist, and that randomness somehow does it all. An Idealist *can* accept what logic insists must exist, and look more deeply.

§ 'For their size, embryonic cells are the most complex structures in the universe' according to Lewis Wolpert, Emeritus Professor of Biology, University College, London. These embryonic cells produce all our normal, average cells. There are thousands of different proteins at work in an average cell, beavering away at a gigantic number of immensely complicated procedures. We each have multiple trillions of cells, all slaving away on our personal behalf. More on this later.

Mutations happen from time to time, for what appears to be either good or ill. What causes these mutations? A Materialist is bound to say they are random. After all, for a Materialist there can be no possible 'ghost in the machine' to direct anything in the body in any way; but for an Idealist, Life, Mind, and Consciousness must surely be involved somehow, as LMC pre-existed the Universe, and must thus have created all the physical stuff within the Universe, like it or not.

§ Please go back to Chapter 5 if you are still having trouble with this.

Note that Darwin never used the word 'random' in *Origins*. For him there was a cause for all things, beginning with 'the Creator'. The process of Evolution by Natural Selection was not random, but caused by millions of contributing events; each individual death or birth fed into the huge overall pattern. Nowadays we would call this a 'chaotic' process, I suppose. 'Chaotic' is not really a very helpful word to describe a non-chaotic but merely extremely complex process, but we seem to be stuck with it. Another Materialist lexical hi-jack, suggesting 'purposelessness', as per the Dogma...

It would thus be reasonable to expect LMC to be involved with its creations somehow. But how, exactly? Another Idealist mystery... More on this later.

But meanwhile, any Religionist who has stuck with this book so far will be leaping up and down, yelling 'Told you so!'

But take care... if there are two of you, one Christian and one Muslim, which of you is right?

Perhaps the answer may be 'both'. Or 'neither'.

So please go easy on all the unseemly triumphalism and brace yourself for some more considered thinking. There's still a long way to go. All enjoyable, I hope.

To my great surprise, it looked as though I had now answered my original question.

Thus: the reason Science isn't interested in ghosts and NDE's and poltergeists and premonitions and all the rest, is that the unspoken Dogma of Materialism that Science has adopted simply will not *allow* Anomalies like telepathy to happen.

§ It is a scientific principle that for something to happen 'at a distance' a medium of some sort is required. For example, for sound to travel from your mouth to my ear, air is required. If you shout at me in a vacuum, the sound will never reach me. As another example, a magnet can move a paperclip across a table while hovering above it because of the magnetic field which links the clip to the magnet; block the field and the clip won't move. This requirement for a medium is standard, although there seems to be one mighty exception to it (for the moment, anyway), which is that Light is accepted as moving through space without a 'luminiferous' ('light-bearing') carrier. Clearly telepathy would be a terrible challenge to a Materialist: what could the carrier possibly be? And as for psychokinesis (the alleged movement of physical objects by Mind alone)...

And, as The Dogma is so revered, it simply is not possible to allow it to be challenged by a single white crow, never mind a huge flock of noisy Anomalous starlings.

If Science (and of course this means Materialist-Science) were to admit the reality of just *one* single spook or Anomaly the whole house of cards would come tumbling down. That is unthinkable, so the Materialist-Science establishment does what nervous people have always done when faced with anomalous evidence that would challenge their certainties: they ignore it or laugh at it. When they can't just ignore it or laugh at it they attack it, occasionally ferociously. More later.

§ We are all used to seeing tv programmes about a haunting automatically wheeling on a Scientist to debunk it, usually with a lot of vague generalities and dogmatic assumptions, rather than any sound proof or evidence, but delivered with great authority, which is almost as good.

(However, I have detected a slightly more independent attitude on the telly in recent years.)

When I realised that this was what was going on I was more than shocked. I was quite disgusted. Science was not meant to be like that. It was meant to be impartial, and was meant to collate ALL evidence to be carefully sifted and evaluated, without prejudice. Evidence was not meant to be ignored because it was inconvenient; and especially not so if it was inconvenient merely to a *dogma*; and, worse, to a completely irrational dogma.

Science had been hi-jacked and distorted, and was now unfortunately operating according to the three-pronged maxim of:

- 1 Anomalies *cannot* happen, by dogmatic definition;
- 2 therefore they *do* not happen;
- 3 therefore, as they do not happen, it would be a waste of our time to investigate them.

...a terrible perversion of the Scientific Method.

Do I exaggerate? Unfortunately, I don't think so.

Can you think of another reason why Science would refuse to *investigate* such challenges as reports of plates flying round the room or endless reports of hauntings and poltergeists? Or of a reason for why they should regularly *mock* such reports?

§ To say that Science doesn't investigate these things because all previous reports have been false, being either fraudulent or erroneously interpreted, won't work for two reasons: firstly, once we've filtered out the frauds, we need to know who proved the others false, and what dogma (if any) he was operating under; and secondly the fact that in the strange world of Anomalies, past events are not necessarily a clear guide to future ones, as not enough research has been done to discover possible common elements. At the moment Materialist-Science has built itself a safely closed and vicious circle: No evidence because no research; No research because no evidence.

Whole libraries are devoted to Anomalous evidence, (for example the splendid one held by the Society for Psychological Research, in London) but only a handful of scientists have ever visited them, and always at high risk to their reputations. Even Isaac Newton, often called 'the greatest scientist who ever lived', and Alfred Russel Wallace, the co-discoverer of Evolution by Natural Selection, suffered professionally for their interest in the paranormal. More on Mr Wallace later.

I've heard bland statements from 'sceptics' suggesting that they don't investigate Anomalies because they are merely anecdotal and can not be reproduced ('...the acid test for science'), but this is nonsense on two counts: some Anomalies certainly ARE testable; and as for anecdotes not being admissible, well, as one clear-minded scientist once put it:

'One anecdote's just an anecdote; but lots of anecdotes is evidence'.

Just so.

To recap: it seemed I really had answered my original question now. Science did not take an interest in spooks because it was in thrall to an irrational dogma that would not *allow* it to take an interest, and would thus go to extraordinary lengths to discredit reports of Anomalies.

I could see no other sensible reason, and was, yes.. disgusted. I could feel the notion of Conspiracy shifting outwards from Mr Dawkins and a couple of other biologists to include all of Science.

§ But, as I said before, this conspiracy tendency passed. More in a while..

So.. time to give up, then? Time to return to cultivating mon jardin, a little wiser but sadder?

Maybe. But by now, it was becoming apparent that the smallholding would need to close down. My health had improved a bit, in that I was about 50-60% normal for most of the time, but that wasn't nearly enough, and we could not realistically look forward to me ever being fully well again. Anne had worked wonders over the twelve years I'd had the M.E., but enough was enough. There was no point in her killing herself to prove a point. We would just have to admit defeat and go onto State Benefit full-time. That's what we did, with great regret. From now on we would be growing food only for ourselves, and we would continue to phase the animals out, mainly by what we call natural wastage: waiting for our lovely April to die, and then the sheep, one by one.

The good side to the bad side was that now I had more time to read and think.

Now I definitely wanted to know *why* science had got itself into this ridiculous and profoundly unscientific bind of setting its collective agenda according to a duff dogma. When did the rot set in? Why?

And also, now that I was satisfied that Idealism was the only rational alternative to Materialism, I realised that here was a philosophy that *could* allow, in some simple basic way, for the existence of spooks: something to do with non-Matter being separate from Matter; non-Matter pre-existing Matter... something to do with Mind... whatever that meant... Hmmm..... How far might one get with a bit more rational thinking..?

More reading now, concentrating on science history, perhaps... to try to track down the point at which science became a sub-branch of Materialism. And some more investigations into the paranormal. I'd come across some truly strange and 'unlikely' stuff, like the observation that ancient stone circles apparently 'contain' a power that will send a dowser's pendulum spinning wildly, or reports of anaesthetised patients reporting back things that they 'could not' have perceived while under anaesthesia. Perhaps the

nearest thing to my white crow requirement were the extraordinary results in remote metal bending produced by John Hasted, Professor of Experimental Physics at Birkbeck College. He poked a dozen or so straightened paperclips through a small hole in a glass sphere and invited his young experimenters to scrunch them up by mind power alone. The resultant scrunches are impressive. Certainly they could not have been poked through the little hole in such a condition. But.. I dunno... still not quite what I was looking for. Maybe if that little hole in the sphere had been heat sealed first?

Getting closer, though.

I guess this brings us to the end of Step One.... Well, almost.

(See pages below for headings of further chapters...)

Part Two

So *that's* the problem! Now what?

This section discovers *why* science has accepted a faulty dogma as Truth, and how religions all have a secret something in common.

It then investigates various aspects of Mind which science often seems to try to ignore, and concludes that there is an alternative to both Big Science and Big Religion's views on the nature of Reality.

Chapter 8	All in the Mind
Chapter 9	Philosophy, or er....
Chapter 10	A Brief History of Materialism
Chapter 11	The Tale of the Kale
Chapter 12	Religion
Chapter 13	Yoga
Chapter 14	Exo and Eso
Chapter 15	Dreams and Hypnosis
Chapter 16	Vibes and Intuition
Chapter 17	The Occult
Chapter 18	The Occult: a Little More
Chapter 19	Mind and Brain
Chapter 20	The Paranormal

Part Three, beginning at Chapter 21, will be the 'positive' section of the book, building upon what I hope are the firm foundations set in Parts One and Two.

Part Three

A Solution?

A rational extension of Idealism is that the standard Theory of Evolution does not go far enough.

There are many other ramifications, too, some quite radical.

A few are explored here.

Chapter 21a	A Great Surprise (DarwinPlus!)
Chapter 21b	Another Great Surprise...
Chapter 21c	And Another ...
Chapter 22	<i>No</i> Great Surprise...
Chapter 23	Time, etc
Chapter 24	A Paradigm Fit for Burning
Chapter 25	Movement

This section also takes a brief look at pattern, paradigms and fluidity.

Part Four

It all Seems to Fit....

How the world will change, in every area from religion, science and philosophy, right down to all our concepts of eg economics, education, the arts, etc once Materialism is rejected in favour of Idealism and something like DarwinPlus.

Chapter 26

Other Implications of DarwinPlus:

- (i) Religion
- (ii) Philosophy etc

Chapter 27

The Price We're Paying..

Chapter 28

So Who's to Blame?

Chapter 29

A Few Conclusions

Chapter 30

At Last!

Some predictions.

Bibliography.