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Network Review

JOURNAL OF THE SCIENTIFIC
AND MEDICAL NETWORK

INSIDE

**Restoring Harmony
and Connection:
Inner and Outer**

**The Not-Yet-Developed World:
Investigating the Parallels
between Adolescence
and Modernity**

The Body and Beyond 1

Network Calendar 2009

2008

- April 3rd – 5th **Mystics and Scientists 32** – *The Science of Happiness and the Experience of Bliss*, University College, Winchester. Leaflet enclosed.
- April 6th **Dialogue** between Matthew Fox and Rupert Sheldrake
- May 13th **Fundraising dinner** at the House of Lords - details to follow
- May 30th **The Legacy of David Bohm**, London. Leaflet enclosed.
- July 3rd – 5th **AGM**, Lindors, Wye Valley – *Science and Imagination*
- August 21st-23rd **Beyond the Brain 7** – *Self and Death – What Survives?*, Canterbury. Leaflet enclosed.
- October 30th – **New Renaissance 3**, Humboldt University, Berlin – *Harmonising Nature, Spirituality and Health*
- November 1st

LOCAL GROUPS

LONDON - CLAUDIA NIELSEN – 0207 431 1177 or email Claudia@cnielsen.eu

We meet at 38 Denning Rd NW3 1SU at 7.30 for an 8 p.m. start when parking restrictions are lifted. Nearest tube station is Hampstead (Northern Line) or Hampstead Heath (Overground). Cost is £8 for members and £10 for guests. Please confirm attendance so I can anticipate numbers. Friends are always welcome.

For more comprehensive information on presentations (to include synopsis and biographies) plus summaries of past ones, go to the London Group page of the Network site at www.scimednet.org. Unless they rely heavily on visual pictures, talks are normally recorded and are available to members at Summaries of Previous Events of the London Group page of the website.

Jan - Thursday 22nd **Isabel Clarke** - *Madness, Mystery and the Survival of God*

Feb – Thursday 26th **William Morris** – *Weaving Middle East Peace*

March – Tuesday 17th **Martin Redfern** - *Reporting Climate Change: Reflections in the Ice*

April – Thursday 23rd **Jennifer Kavanagh** - *The World is our Cloister: the modern religious life*

OTHER GROUPS

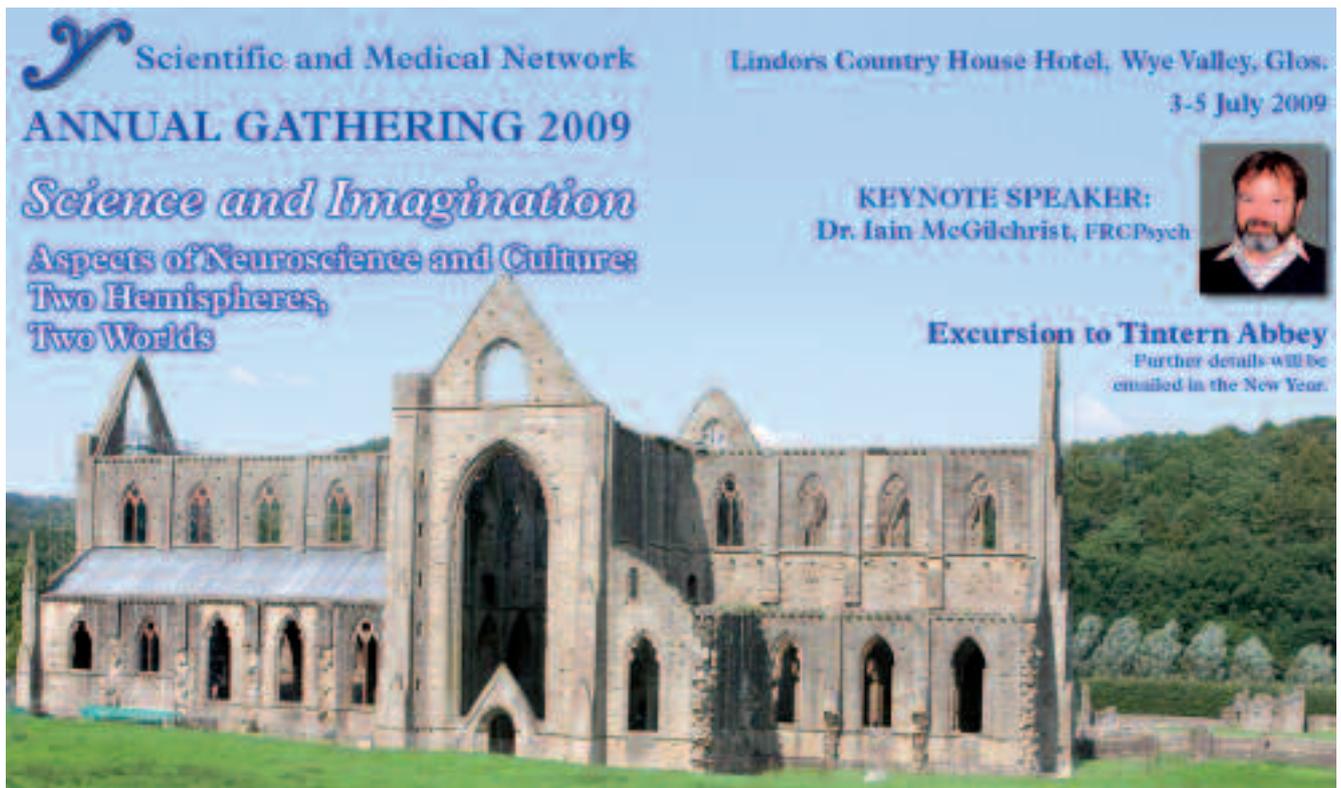
CAMBRIDGE

Wednesday 14th Jan **Richard Michell** will introduce a discussion on *Veganism*.

MANCHESTER

Saturday 7th February **Anthony Peake** on *The Daemon*
David Lawton on *Metaphysics and the Near-Death Experience*.

Please check email newsletter and website in case dates change.



Scientific and Medical Network
ANNUAL GATHERING 2009
Science and Imagination
Aspects of Neuroscience and Culture:
Two Hemispheres,
Two Worlds

Lindors Country House Hotel, Wye Valley, Glos.
3-5 July 2009

KEYNOTE SPEAKER:
Dr. Iain McGilchrist, FRCPsych

Excursion to Tintern Abbey
Further details will be emailed in the New Year.

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"Tiger's Nest Monastery in Bhutan"
By Claudia Nielsen and Nick Nielsen

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Some More Thoughts on Tightropes – A Personal View

Chris Lyons

VERY MUCH liked Martin Redfern's piece in the last edition of *Network Review*, in which he described the tight-rope we walk in the SMN. As I see it though, there are two ropes we're traversing, which are distinct but related. One is the one that Martin described - between dogmatic science and flakey nonsense - and I don't think we do it that well. Though we criticise, and define ourselves against, dogmatic science, we're far less clear about our boundary with mumbo-jumboism. The other tightrope is that between our two mutually conflicting guide-lines of *rigour* and *care for others*. No-one likes having their views criticised, of course, especially their world-views, but it seems to me that we've gone so far to avoid making people uncomfortable that we never criticise anything that anyone ever says. I've heard what I consider the most arrant nonsense politely applauded at Network events, with barely a word of dissent. If we're not to become apologists for everything that's merely unconventional or unorthodox, I think we need to change this culture.

There's no doubt that science, with its insistence upon reason and evidence, has hugely increased our knowledge. The question that remains is whether it's capable of giving us a complete picture – whether materialism as currently construed is *adequate* to explain reality, or whether there is something else going on which is not subject to universal laws and therefore isn't susceptible to scientific explanation. This is a possibility which needs to be carefully considered, but doing so doesn't warrant a retreat into unreason. And neither, I think, can we expect intuition to fill the gap. Though a valuable faculty to develop, it can be hugely unreliable. If you doubt this, think of how just a few centuries ago it was practically universally intuited that the Earth was at the centre of the universe. Consider too that virtually every scientific hypothesis begins as an intuition, yet the vast majority of them eventually fail to be supported by evidence and are rejected.

There are two big and very difficult questions on the edges of science. One concerns the origin of the universe, the other the relationship

between matter and inner experience (the so-called hard question of consciousness). It's possible that these represent the limits of what science can achieve, but we can't be sure of this, and it isn't a reason not to keep on pushing at the limits of knowledge. Moreover, to introduce a final cause or supernatural explanation for these things gets us no-where. In this sense, God is an epistemological dead-end.

Whilst the SMN has no official dogma or creed, there are a number of questions it asks which wouldn't usually be discussed in orthodox scientific circles, and could be regarded as challenges to the orthodox view. I would list them as follows:

1. Does consciousness arise, not in the brain, but entirely beyond the physical body?
2. Does consciousness survive physical death?
3. What is the meaning or value of extraordinary, transpersonal or mystical experiences?
4. Do humans have senses beyond the five commonly recognised ones – for instance, being able to see auras or dowse.
5. Can minds directly affect the world beyond the body?
6. Does intercessionary prayer work?
7. Can humans effect healing in others beyond the others' own (placebo-like) intrinsic healing capacity?
8. Do chakras exist? Does chi exist? Are homeopathy and acupuncture more than just placebo and theatre?

These are all interesting questions, amongst the most interesting that could be asked. But the problem, as I see it, is that we never get any closer to answering them. What I'd like to see the SMN do, is to embark upon a critical examination of these issues whereby the best evidence for and against is presented, scrutinised, challenged and debated. By this means, we could arrive at a position whereby the important issues are highlighted and the crucial questions sharpened, whilst the rest is allowed

to melt away. Not only would this enliven the SMN, it would also, in my opinion, remove the main danger that I think threatens the organisation, which is this. To treat the above questions in a largely one-sided way can give the impression that we regard them as already adequately answered, and that the failure of this to be more generally accepted is due only to the prejudices of the orthodox scientific community. At a time when unreason is on the march, and when quack medicine and junk science are hugely popular, this makes the SMN very attractive to those who embrace all sorts of new-age nonsenses, which in my view puts the organisation well on the slippery slope towards mumbo-jumboism.

In addition to the above eight questions though, there is another one which the SMN has not as yet focussed upon, but which I think it could usefully so do. It is: whence come our moral values? It's often said that science can only answer 'what is' questions and can say nothing about 'what should be', which must be left to religion to answer. I don't think this is so. Human beings don't need the Ten Commandments to know that killing and stealing are wrong – at least amongst their own community; and however the Church of England finally resolves the matter of homosexual clergy, I don't think it will be through some hitherto undiscovered verse in the Bible. The moral sense seems to be innate to humans, and even possibly to some animals too. We seem to have evolved to be moral, as science is now beginning to show. If we better understood the origin of our moral sense, we might even be able to refine and enhance it. I think this would be very fertile territory for the SMN to explore.

Dr. Chris Lyons is a GP and Treasurer of the Network.

The Editor welcomes correspondence on this and other articles.



The Moral Bankruptcies of our Civilisation

Ben Okri

In this powerful piece, Ben Okri calls for a fundamental re-examination of our values.

THE CRISIS AFFECTING our economy is a crisis of our civilisation. The values that we hold dear are the very same that got us to this point. The meltdown in the economy is a harsh metaphor of the meltdown of some of our value systems. For decades poets and artists have been crying in the wilderness about the wasteland, the debacle, the apocalypse. But apparent economic triumph has deafened us to these warnings. Now it is necessary to look at this crisis as a symptom of things gone wrong in our culture.

Individualism has been raised almost to a religion, appearance made more important than substance. Success justifies greed, and greed justifies indifference to fellow human beings. We thought that our actions affected only our own sphere, but the way that appalling decisions made in America have set off a domino effect makes it necessary to bring new ideas to the forefront of our civilisation. The most important is that we are more connected than we suspected. A visible and invisible mesh links economies and cultures around the globe to the great military and economic centres.

The only hope lies in a fundamental re-examination of the values that we have lived by in the past 30 years. It wouldn't do just to improve the banking system — we need to redesign the whole edifice.

There ought to be great cries in the land, great anger. But there is a strange silence. Why? Because we are all implicated. We have drifted to this dark unacceptable place together. We took the success of our economy as proof of the rightness of its underlying philosophy. We are now at a crossroad. Our future depends not on whether we get through this, but on how deeply and truthfully we examine its causes.... What we need now more than ever is a vision beyond the event, a vision of renewal.

Lack of Vision

As one looks over the landscape of contemporary events, one thing becomes very striking. The people to whom we have delegated decision-making in economic matters cannot be unaware of the consequences. Those whose decisions have led to the economic collapse reveal to us how profoundly lacking in vision they were. This is not surprising. These were never people of vision. They are capable of making decisions in the economic sphere, but how these decisions relate to the wider world was never part of their mental make-up. This is a great flaw of our world.

To whom do we turn for guidance in our modern world? Teachers have had their scope limited by the prevailing fashions of education. Artists have become more appreciated for scandal than for important revelations about our lives. Writers are entertainers, provocateurs or, if truly serious — more or less ignored. The Church speaks

with a broken voice. Politicians are more guided by polls than by vision. We have disembowelled our oracles. Anybody who claims to have something to say is immediately suspect.

So now that we have taken a blowtorch to the idea of sages, guides, bards, holy fools, seers, what is left in our cultural landscape? Scientific rationality has proved inadequate to the unpredictabilities of the times... This is where we step out into a new space. What is most missing in the landscape of our times is the sustaining power of myths that we can live by.

A New Orientation

If we need a new vision for our times, what might it be? A vision that arises from necessity or one that orientates us towards a new future? I favour the latter. It is too late to react only from necessity. One of our much neglected qualities is our creative ability to reshape our world. Our planet is under threat. We need a new one-planet thinking.

We must bring back into society a deeper sense of the purpose of living. The unhappiness in so many lives ought to tell us that success alone is not enough. Material success has brought us to a strange spiritual and moral bankruptcy. If we look at alcoholism rates, suicide rates and our sensation addiction, we must conclude that this banishment of higher things from the garden has not been a success. The more the society has succeeded, the more its heart has failed.

Everywhere parents are puzzled as to what to do with their children. Everywhere the children are puzzled as to what to do with themselves. The question everywhere is — you get your success and then what? We need a new social consciousness. The poor and the hungry need to be the focus of our economic and social responsibility.

Every society has a legend about a treasure that is lost. The message of the Fisher King is as true now as ever. Find the grail that was lost. Find the values that were so crucial to the birth of our civilisation, but were lost in the intoxication of its triumphs. We can enter a new future only by reconnecting what is best in us, and adapting it to our times. Education ought to be more global; we need to restore the pre-eminence of character over show, and wisdom over cleverness. We need to be more a people of the world.

All great cultures renew themselves by accepting the challenges of their times, and like the biblical David, forge their vision and courage in the secret laboratory of the wild, wrestling with their demons, and perfecting their character. We must transform ourselves or perish.

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The Times, 30th October, 2008



Restoring Harmony and Connection: Inner and Outer

A speech by HRH The Prince of Wales at the Foreign Press Association Media Awards, Sheraton Park Lane Hotel, London, 25th November 2008

In this profound analysis, The Prince of Wales, like Ben Okri, takes a deeper look at our current predicament by framing it in terms of a crisis in world view in which we are disconnected from Nature as well as from our inner selves. He advocates a participatory approach in which we value intuition along with rationality, working in harmony with Nature as well as rediscovering our spiritual roots.

GOOD EVENING Ladies and Gentlemen. I would like to thank the Foreign Press Association for inviting me to speak at your awards tonight. The FPA is twice as old as I am and doubtless is in far better shape after celebrating its 120th anniversary than I am after my 60th!

Throughout those 60 years I have become accustomed to journalists accusing me of occupying a privileged position – the privilege to be abused, if you ask me. If I may say so, you also, ladies and gentlemen, occupy a privileged position. It is surely your role not only to look at the world and study the way it works, but to report what you see accurately, to explain it and, indeed, to interpret it. In so doing you shape the view and define the perspective of millions of people and that is an enormous responsibility – a responsibility I know that many of you in this room fulfil with integrity and flair.

I imagine the responsibility you bear compels you from time to time to step back and take stock of your perspective. After all, our view can so easily become obscured by the cultural values that surround us all and if our view is not wide enough - or deep enough - then our perspective cannot be sure.

A Crisis of World-View

In fact, there is mounting evidence that our collective perspective is not at all as sure as we once thought it was. Wherever you look the arguments that justify what we call 'progress' are finding it harder and harder to hide the less than glamorous side-effects of all we have achieved. The present crisis in the financial world, known to us all as the 'Credit Crunch', is but one recent graphic example; the environmental crisis that confronts us and is, in fact, a 'Climate Crunch', is another. I wonder, though, whether these crises would have flared so alarmingly had our perspective been somewhat wider when the decisions that have caused the troubles we now face were originally taken?

Also, we live in an age when technological ease has become so much a part of the accustomed way of life that it seems 'natural' to some, and even their right. But what does our comprehensive dependence upon such technology do to our connection with Nature and its patterns? Is it possible that it has loosened our inner moorings and shifted our orientation onto something extraneous to us? Does our increasing dependence upon technology begin to make us

believe that we, too, and the world about us, are merely part of some enormous mechanical process?

These are questions that have concerned me for many years, and in considering them I have attempted in various ways to highlight what I see as the limited perspective that supports them. Why? Because there is now a worrying imbalance in the way we are persuaded to see the world. Our perception of Nature, in particular, has become dangerously limited.

Needless to say, when I have spoken of these things I have been shot at from all sides – the natural consequence, I suppose, of having the temerity to challenge the status quo of scientific Modernist rationalism. But undeterred by the barrage of high calibre invective, I would like to explain what lies at the heart of my concern and why I have expended so much of my energy trying to rectify the problem in the areas where it has manifested itself most virulently. I want to do this because the way you see the world, Ladies and Gentlemen - the way you understand why things are the way they are – is, I would suggest, vital to the future of this threatened planet.

Pressures to Consume

It was a question from a newspaper correspondent back in the 1930s that drew from Mahatma Gandhi one of his pithiest responses. During his visit to Britain he was asked what he thought of Western Civilisation, to which he replied, 'it would be a very good idea.'

Gandhi realised that Humanity has a natural tendency to consume and that if there are no limits on that tendency we can become obsessed simply with satisfying our desires. The desire grows ever more potent as we consume ever more, even though we achieve very little of the actual satisfaction we desire. Is this not so in the Western world today? Despite such high levels of consumption, we hear so many people admitting to feeling deeply dissatisfied. Studies now show this to be the case too. A report by the Children's Society in this country concluded earlier this year that the pressure on children, particularly those from poorer backgrounds, to have the latest designer clothes and computer games is resulting in more and more of them falling into depression. Which reminds me of that wise observation about Gross National Product made by Robert

Kennedy forty years ago, that it 'measures everything except that which makes life worthwhile.'

One of the downsides of consumerism, it seems to me, is that it forces us to compromise on issues that should not be compromised. I'm sure there are many people who know that it is wrong to plunder the Earth's treasures as recklessly as we do, but the comprehensive world view which we now inhabit persuades us that such destruction is justified because of the freedom it brings us, not to say the profits. In other words, our tendency to consume is legitimised by a view of the world that puts Humanity at the centre of things, operating with an absolute right over Nature. And that makes it a very dangerous world view indeed.

It is an approach which accepts as the norm a one-sided, entirely 'linear' form of progress and an extremely literalised view of the world. For some reason we have been persuaded that what we see is all we get. It is a view encouraged, I am afraid, by some of the Media, and it concentrates only on the outward parts of creation. It does not look to the whole - so much so that we happily de-construct the world around us, dismissing as unreal anything that cannot be objectively measured and tested. It is, if you like, a world of only visible quantities.

An Approach Fit for Purpose?

The question I would ask you to ponder this evening, then, is whether this predominantly rational, technologically driven and secularist approach to life is actually 'fit for purpose' in the twenty-first century?

It is an approach which has been adopted in such a wholesale fashion that I feel many do not even realise that we have lost something very precious - what I might best describe as that intuitive sense of our interconnectedness with Nature - which includes the realm beyond the material.

The movement responsible, in my view, for the imbalance rose to dominance at the start of the 20th Century. As you will know it is often called 'Modernism'. Now, this movement must not be confused with the great social, economic and political advances of the earlier 'modern' age, the many benefits of which endure to this day.

No, the 'Modern-ism' I refer to offered us an unrelenting emphasis upon a material and mechanistic view of the world. To quote from the Victoria and Albert Museum's foreword to its recent exhibition on Modernism, 'Modernists had a Utopian desire to create a better world. They believed in technology as the key means to achieve social improvement and in the machine as a symbol of that aspiration.' Generally speaking, we can say that it focussed its attention upon the parts and not the whole - to the point of deconstructing the world around us - and dismissed as unreal anything that could not be objectively measured and tested.

As I said earlier, this approach has, of course, brought us obvious benefits. But I would argue, however, there have also been costs to this 'instrumental' relationship with the world which, as we are finding out, are increasingly painful and destructive.

By the arrival of Modernism the West had been held in the sway of a mechanical way of thinking for over two hundred years. An approach set in train by the likes of Descartes with his concept of Man as Machine. The collective view of things had also been shaped by two centuries of what has now become the comprehensive industrialisation of life with its linear process of inputs and outputs and with urban perspectives taking precedence over traditional, rural ones. Thus the ground was laid for the arrival of those straight, efficient lines of Modernism with the aim of simplifying and

standardising the world, making things as efficient and as convenient as possible.

This is why, for example, the curved streets of towns became straight matrices and why we have so many buildings grouped into single-use zones, including those for living - most noxious of all, those high rise blocks of flats which, throughout the 1960s and 70s, became the living quarters - indeed ghettos - for thousands of people in every city across Europe and the United States.

Architecture and Community

Removed from their communities, people were accommodated in these brand new, convenient, concrete cul-de-sacs in the sky, and lo and behold, when their newness quickly faded those areas all decayed into violent and soul-destroying ghettos with no sense of place, nor any capacity to nurture community. And guess what is happening now in the new cities springing up in China and India? As they doggedly follow the Western pattern of forty years ago people are, once again, compelled by forces beyond their control to leave their farms and their communities to seek housing where they end up living like factory-farmed chickens in those self same, high-rise, soulless, mechanical boxes. Thus are millions more people condemned to the same toxic future.

The reason I have been so exercised about such architecture and such urban design is that the imposition of that simplistic and empty geometry drastically reduces the richness of a complexity that is actually more crucial to health than many seem to realise. Unfortunately, those who drove this 20th century ideology did not seem to understand (or perhaps they simply ignored) what today's intricate studies of biology and microbiology declare loud and clear - that complexity is actually key to life. The diversity that made up this complexity was bulldozed away in the pursuit of simplicity, of increasing uniform monoculturalism and, above all else, convenience, creating an instant appeal that continues to fuel the conspicuous consumption and throwaway societies we now see everywhere. Just what Gandhi most feared and predicted...

A Crisis in Perception

The question is, how has this come to be? I would suggest it is the net result of two important seismic shifts in our perception.

First, Modernism fuelled a fundamental disconnection from Nature - from the organic order of things that Nature discloses; from the structure and cyclical process of Nature and from its laws which impose those natural limits Gandhi was at such pains for us to recognise.

As a result, our perception of what we are and where we fit within the scheme of things is fractured. This is why I consider our problems today not to be an environmental crisis per se... nor a financial crisis. They all stem from this fundamental crisis in our perception. By positioning ourselves outside Nature and believing ourselves to be free without limit to manipulate and control her constituent parts, imagining somehow that the whole will not suffer and can take care of itself whatever we do to its separate parts, we have abstracted life altogether to the extent that our urbanised mentality is now out of tune with the key principles under-pinning the health of any economy and of all life on Earth. And those principles make up what is known as 'Harmony'.

Biology now shows us that in all living things there is a natural tendency towards Harmony. Organisms self-organise

themselves into an order which is remarkably similar at every level of scale, from the molecules in your little finger to those vast eco-systems like the all-important equatorial rainforests. Life seeks and finds balance. This means there is an over-riding coherence to the complexity of life on Earth, at every level of scale - to the extent that we should really see every organism as a complex system of interrelated and interdependent parts. They work together in a coherent way to produce a harmonic whole. And when it is in balance, when there is harmony, the organism is healthy.

But we do not think we need this in our farming, nor in the streets where we live, nor in the way we treat our own health and our immune systems. And so, whether it is the microbe, the ecosystem or the entire environment upon which we all so profoundly depend, the living organism suffers 'dis-ease'. It gets sick.

This is why, for what it is worth, I have been so concerned and outspoken about the way in which industrialised agriculture sees Nature simply as a mechanical process, as if it is supposedly ever capable of producing yet more at no long term cost. When you consider that in one pinch of soil there are more microbes than there are people on the planet you have to ask what irreversible damage do we do to the delicate, complex balance of such a fragile ecosystem as the six inches of top soil that sustains all life on Earth when we subject it to chemicals that are so much part and parcel of the agri-industries of today? The soil's health is our health. And yet we have eroded it and poisoned it and failed to replace lost nutrients to such a degree that a recent worldwide survey for the UN found that in just fifty years we

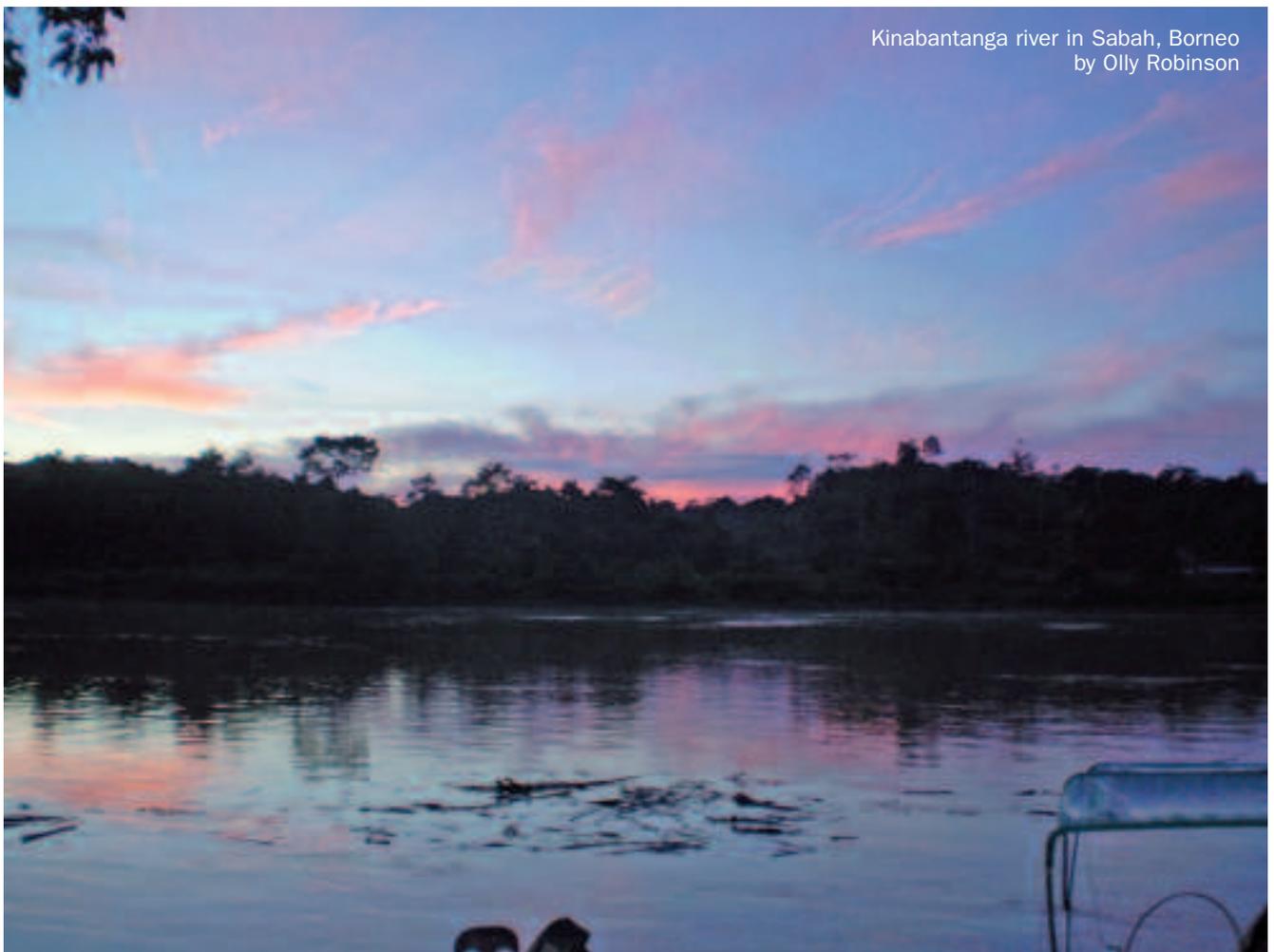
have lost a third of the world's farmable soil. That is hardly a sustainable rate of exploitation. We have done so because we have either ignored or simply forgotten how profoundly 'health' depends upon organisms operating in harmony with their surroundings and within the cyclical rhythms of Nature. This is neither a debating point nor a coincidence. It is a fundamental law of Nature. All organisms depend upon a state of harmony to be healthy.

But this is only half of the story. And I don't want to end without making a brief mention of the other, and in my view, deeply worrying aspect of our separation from what Nature discloses.

Spiritual Roots

Implicit in the ideology of 'Modernism' was the notion that we could somehow disconnect ourselves not just from an outward contact with Nature, but from our inner nature too; from the accumulated wisdom of the ages. Thus spiritual practice is nowadays denigrated by many. It is seen to be nothing more than outdated superstition. But, being lovers of words, I am sure you will be as intrigued as I am that 'super-stition' actually means something much more profound if you see it as two words. They point to a heightened sense of something within. But what? Could it be that animating source of the harmony inherent in all life? Could it be that intuitive element in our human constitution; that 'sixth sense', perhaps?

It is interesting that the physicist Werner Heisenberg, who gave his name to the Uncertainty Principle in quantum physics, would tell his students not to see the world as being



Kinabatangan river in Sabah, Borneo
by Olly Robinson

made of matter. It was, he said, made of music. He recognised what Pythagoras knew well, that chaos is ordered by number and that Nature is made up of precise numerical patterns. They express diverse movement, but always within the defining boundaries of Unity.

Is it not worth recalling that every one of the great civilisations right back to ancient times understood this patterning? They depicted what might be called the 'grammar of harmony' in their mythology and through the symbolism that adorns much of their art and architecture. That is because these patterns reflect symbolically the nature of the unseen realm. Such patterns, so familiar to us in every sacred building from the ancient Hindu temples of India to the great Gothic cathedrals of these islands, were seen as key to understanding the subtle structure of awareness, which is the ultimate sacred wonder. Our nature mirrors that sacred wonder. Now, is this superstition or, once again, to do with the fundamental laws of Nature?

In cutting ourselves off from Nature we cut ourselves off, more and more, from what we are; from our inner selves, and from what that in-born tutor, our intuition, offers us.

By this stage in the proceedings you may well be asking what on earth I am trying to get at. You may believe that I have some curious and reactionary obsession with returning to a kind of mock Medieval, forelock-tugging past. In fact all I am saying is that we simply cannot contend with the global environmental crises we face by relying on clever technological 'fixes' on their own. It is, as the conservationist Aldo Leopold has put it, like fixing the pump without fixing the well. We have to alter our perspective of the world and to begin to realise that Modernism on its own is in fact unfit for purpose in the twenty-first century.

The lessons are all around us. When I went to see the appalling devastation of the Tsunami in Sri Lanka I was fascinated – but not surprised – to learn of how the tribal peoples of the tiny Andaman and Nicobar Islands survived. They live in the middle of the Bay of Bengal, 800 miles east of Sri Lanka and 340 miles to the north of Sumatra. They were closest to the epicentre of the earthquake and yet, despite the islands bearing the brunt of the devastation, nearly all their people were saved. And how? By using their instinctive powers of participation. Coastal tribes like the Onge and Jarawa on South and Little Andaman noticed subtle changes in the behaviour of birds and fish. These warning signs are woven explicitly into their folklore – passed down from one generation to another – and so they responded immediately to these warnings.

Participation and Harmony

Such people, Ladies and Gentlemen, do not observe the world from the outside. They consider themselves to be participants in it; they define life on Earth as 'sacred presence' and they do something if they sense that the balance of things is beginning to fragment. So maybe there are lessons for us here: firstly, that to ignore all the God-

When I went to see the appalling devastation of the Tsunami... I was fascinated ... to learn of how the tribal peoples of the tiny Andaman and Nicobar Islands survived. They were closest to the epicentre of the earthquake and yet, ... nearly all their people were saved... By using their instinctive powers of participation.

given senses, save the rational, may be the quickest way for mankind to head for extinction; and, secondly, that we, too, should consider where our modern day 'folklore' is leading us.

So, what I am suggesting then is a regaining of an active appreciation of the harmony inherent in all life. And that means, shifting our perception; taking a step back and seeing that we are not separate from Nature - we are immersed in it completely, as a fish is in water. But we can only do that by restoring to the mainstream the essence of the lost spiritual dimension. Simply because the real treasure in life lies in our hearts. And yet all Modernist approaches to education educate it out. It is time to restore that sense of the sacred to its rightful place before it really is too late.

Ladies and Gentlemen, I have tried to suggest that the denial of our real relationship with the universal truths through a deep connection with Nature and her laws has engendered a dangerous alienation. In denying or forgetting the invisible 'grammar of harmony' we create cacophony and dissonance. So if we hope to restore the balance, we need to reintegrate in a contemporary way the best parts of this abandoned and ancient understanding of Harmony with the best of modern technology and science, not least by developing the kinds of innovative and more benign forms of technology that work WITH the grain of Nature rather than against it.

You may say that this is impossible, but it seems to me that a good start would be to take that long, hard look at ourselves and, as I suggested, to question very seriously whether the dominant attitude of our day is fit for purpose; whether it really enables us to see things as they truly are. Then, but only then, we may begin to head in the right direction, towards a much more participative, integrated way of living; one that places greater value on coherence and the limits of Nature. And, essentially, sees the world the right way round.

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Happiness and the Teaching of Values

Richard Layard

Given the analysis presented by Ben Okri and The Prince of Wales, we clearly need new educational approaches if we are to enable our children to be happier than we are and begin to restore a greater sense of mutual trust.

A MAJOR PURPOSE of schools must be to help develop good and happy people – especially at a time when growing numbers of children are suffering from emotional disturbance. Richard Layard argues that we need a new cadre of teachers specifically trained to teach values and the ways to happiness.

Ever since I first read Jeremy Bentham, I have been convinced that the best society is one with the greatest happiness and (especially) the least misery. I have become even more convinced of this since modern neuroscience has shown that happiness and misery are objective phenomena and that what people say about themselves provides a great deal of evidence about what they actually feel.

So what do people say? It is not very encouraging. Despite huge increases in living standards, people in Britain, Japan and the United States report themselves no happier today than people did 50 years ago. Moreover, a variety of studies of depression and anxiety disorders in different countries suggest that these problems have probably increased in prevalence.

Evidence for Britain certainly indicates big rises in emotional disturbance. For example, the proportion of 16-year-olds with serious emotional problems rose from 10% in 1986 to 17% in 1999 (Collishaw et al, 2004). A study based in the West of Scotland showed similar changes over that period (West and Sweeting, 2003). And the latest research by Stephan Collishaw and his colleagues, which covers the whole country and comes right up to 2006, shows that things have continued to worsen.

So what is going on? In the most careful study of patterns of happiness, economist John Helliwell has used four waves of the World Values Survey done in 46 countries over the last 20 years. He takes as his 'dependent variable' the average happiness in a country and explains 80% of the variance by six variables, four reflecting ethical values:

- The perceived trustworthiness of individuals.
- The trustworthiness of government and the courts.
- The community involvement of individuals.
- The divorce rate.

Individualism and the Fall in Trust

I want to focus particularly on the trustworthiness of individuals. Each survey respondent is asked 'Do you think most other people can be trusted?' The proportions saying 'yes' vary enormously and are highly correlated with the results of a Reader's Digest experiment, which left wallets in

the streets of different countries and then counted the number of wallets returned to their owners. Trust is very high in Scandinavian countries, and this helps to explain why these countries generally come out as the happiest countries in surveys. Similar findings about personal decency emerge from a survey that asked 11-15-year-olds 'Are most of your classmates kind and helpful?' 70% or more said 'yes' in Scandinavian countries, but the figures were considerably lower for some other countries: 53% in the United States, 46% in Russia and 43% in Britain (UNICEF, 2007).

The sad fact is that in Britain and the United States, there has been an extraordinary fall in trust since 1960: from roughly 56% of the population trusting most other people to only 30% today. Levels of trust in Britain are particularly low among young people: only a quarter say 'yes' when asked if they trust most other people (Park et al, 2004). By contrast, there has been no fall in trust in any other European country since 1981 when the data were first collected. My explanation of this is the huge growth of individualism in the United States, which has washed across the Atlantic like a tsunami, hitting Britain first and the rest of Europe much less, so far. By individualism, I mean the view that a person's main goal should be to make the most of themselves or, more vulgarly, to be as successful as possible compared with other people. Put that way, it is of course a zero-sum game, and if that is what people value, there is no way our society can become happier. To do that, we have to move to a positive-sum game in which we each care positively about the well-being of others.

Learning the Ways to Happiness

How can we do this? I think it requires an educational revolution in which a central purpose of our schools is to teach young people about the main secrets of happiness for which we have empirical evidence. Among these 'secrets', I would include:

- If you care more about other people relative to yourself, you are more likely to be happy (Lyubomirsky et al, 2005).
- If you constantly compare yourself with other people, you are less likely to be happy (Schwartz et al, 2002).
- Choose goals that stretch you, but are attainable with high probability (Nesse, 2000).
- Challenge your negative thoughts, and focus on the positive aspects of your character and situation (Seligman, 2002).

These are not exactly novel thoughts. They are, if you like, the 'perennial philosophy', but rigorously established by modern psychology. The first principle is about compassion to others; the others are about compassion towards yourself. The principle of compassion for others cannot of course be based on self-interest – if it is, it will fail. Rather, it has to be realised through deliberate cultivation of the primitive instinct of empathy, which is latent to a varying degree in each of us.

These principles may seem obvious but they are not easy to put into practice. Learning hard things takes an enormous effort. How can we expect people to learn to be happy without massive amounts of practice and repetition? Good parts of traditional religions (especially Buddhism) involve just such practice, but what institutions do we have today that can play this basic role?

I believe it can only be done by schools. Parents of course are crucial. But if we want to change the culture, the main organised institutions we have under social control are schools. So what should they do? Though I was once a school teacher, I certainly don't have a complete answer, but let me first report two suggestive experiments and then draw out some general principles.

The Penn Resiliency Project

The first example is one of a number of programmes designed to build character, which have been subjected to controlled trials. The Penn Resiliency Project was designed by Professor Martin Seligman, the founder of 'positive psychology'. In it, 15 11-year-old students spend 18 classroom hours on such issues as understanding their own emotions and those of others, and developing concern for others. They are taught by one teacher, who has been trained in the method through eight hours of online self-study and 10 days of face-to-face training.

The programme has now been evaluated in 11 different studies and, except in one school where the training was inadequate, it has reduced the rate of teenage depression over the next three years by on average one half. It has also reduced bad behaviour by one third (Reivich et al, 2005).

I believe this programme is an object lesson in how our educational system should develop. It has always amazed me how little the scientific method is applied in the classroom, except perhaps in the teaching of reading and number. In the last three years, I learned a lot about the results of psychological therapy, all of which are based on controlled trials – and I have become even more amazed at the scarcity of proper evaluation in education.

If something as sensitive as psychological therapy can be scientifically evaluated, surely the same should apply to classroom education? For every subject, we should know from controlled trials what teaching methods work best. And this applies as much to the teaching of values as to anything else.

The other lesson that emerges from the programme is the importance of detailed and systematic training of the teachers. As has been found with psychological therapy, the effectiveness of a given teacher will vary enormously according to how well they have been trained. We no longer need to rely on the inspired amateur.

Of course, controlled trials are one thing; delivery on a large scale is another. Having read these findings, it seems to me worthwhile to introduce the programme on a large scale in Britain. Compared with small-scale controlled trials, when half the children are excluded, large-scale delivery to every child in a community should have bigger effects per

child because each child taking the programme would interact with other children who had also taken it.

If this applied to all the children in a city, it should be possible to modify the whole youth culture of that city. I was therefore thrilled that the very imaginative local authority of South Tyneside has decided to implement the programme in all its schools, while Manchester and Hemel Hempstead are using it in a dozen further schools. The Department for Education and Skills (DfES) are paying for a full-scale evaluation.

If the programme is as successful as we expect, we hope it can contribute significantly to the first year curriculum for Personal, Social and Health Education (PSHE) in secondary schools, and can then be followed by programmes with older children.

Values Schools

The second experiment began in West Kidlington primary school in Oxfordshire and has now been copied in at least a dozen state primary schools that call themselves 'values schools'. The basic aim is to give the children control of their emotions by familiarity with uplifting ideas and the practice of silent reflection (Farrer, 2000)

The school has adopted 22 key value words – words like 'honesty', 'hope' and 'respect' – each taking a turn as the 'word of the month', with which teaching and discussion continually connect. Silent reflection is practised daily at the end of school assembly, and at the beginning of most classes. The key question children are asked is 'What am I like when I most like myself?' Ancillary questions are 'What makes me happy?' and 'How can I make other people happy?'

The first principle is about compassion to others; the others are about compassion towards yourself. The principle of compassion for others cannot of course be based on self-interest...

Four Principles of Reform

With these two practical examples in mind, let me offer four principles that should govern the role of schools in character-building.

First, it should be an explicit aim of each school to train character and provide moral education. Teachers should stand for clear values and, when asked about moral questions, should make clear what they believe. It is not enough to treat moral issues as interesting topics for debate. It is more important to train up the emotions that support moral action than the intellectual skills involved, though of course both matter.

Second, each secondary school should have specialists in PSHE (or, as the subject might more appealingly be called, 'life skills'). And while the whole school should reflect the values taught in PSHE, there must be full-time professional leadership. It is no good having it taught mainly by part-timers without specialist training, though they can certainly help. This is one of the most difficult subjects to teach, and most people who teach it should have taken it as a specialism in their training. Without a cadre of specialist teachers acting as standard bearers of the movement, there is no chance of the educational revolution we need.

Third, there is no chance of success unless the movement is grounded in science. We live in a scientific age, and, although pockets of fundamentalism remain, only science can and should persuade the young about the routes to a happy society. Now for the first time we have in positive psychology a science that provides the underpinning for morality and personal liberation.

Fourth, the curriculum should include: managing your feelings; loving and serving others; appreciating beauty; love, sex and parenting; work and money; a critical approach to media; political participation; and moral philosophy. The DfES has been active in curriculum development in this area, and the SEAL programme (social and emotional aspects of learning) is well-grounded, with excellent materials at primary school level.

But what I am proposing is something more campaigning and more high profile. We need a government commitment to producing a major specialism in this area, with a serious teacher training programme. Moreover, PSHE should continue up to age 18, and include projects that are graded by the school. It should also feature in the head teacher's report for every university applicant.

Do we Need it and Can we Succeed?

Clearly I am talking about a movement of moral reform. Do we need it, and can it succeed?

Let me remind you where we started. I think we have a pretty good society compared with most that have existed. But we have not become happier in the past 50 years. We have made enormous progress in the mastery of nature but none in the mastery of ourselves – and if we want to make further progress in wellbeing, it has to come mainly from the latter. If we think we cannot afford the time because of the threat of global competition, we had better take an introductory course in economics.

On top of that general case, there is the specific worry these days about young people. Concerns about their behaviour has led to the Prime Minister's 'respect' programme, which so far has been more repressive than preventive. What I am suggesting would contribute significantly to prevention – and there is serious scientific evidence that young people are becoming more disturbed.

So what are our chances of success? Some people would say they are weak. Some programmes in schools focused on particular problems like drugs have had little success though there is some evidence that wider programmes based on the whole ethos of the school are more effective (Bonell et al, 2007; Weare and Gray, 2003).

But I am talking about something bigger than a programme; I am talking about the reversal of a major cultural trend towards increased consumerism, increased inter-personal competition and increased interest in celebrity and money.

Many people assume that cultural trends go on in the same direction forever. But that is not my reading of English history. I see something more like cycles: increased Puritanism in the sixteenth century giving way to increased licence from around 1660; then from around 1830, increased Puritanism again and the growth of Victorian values; and in the twentieth century, again increased licence. So why not in the twenty-first century a shift away from 'anything goes' – or at least a shift towards a more compassionate society?

But how plausible is the education system as the main catalyst of change? Well, it has been so in the past. Universities played a major role in the Puritan revolution of

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the sixteenth and seventeenth centuries, and Thomas Arnold of Rugby did more than anyone to convert the middle classes to Victorian values. Today, more people spend more of their life in the education system than ever before – so it is the natural catalyst for change. 50% of young people say that their main ambition is to be happy: it's the most commonly stated ambition and very sensible too (Park et al, 2004). Let's help them.

I have no doubt that new institutions will also develop for adults. In California, the psychologist Paul Ekman has suggested chains of 'compassion gyms', where you train your mind in compassion, just as you train your body in the physical gym. I also hope that the churches will do more to help people train their minds in the mental disciplines that we know can lead to serenity and compassion.

But from a public policy perspective, we must start with schools. This is a good moment. People are worried about young people from many angles. We have good tools with which to help them. The key need is to create a profession of PSHE teachers, who give evidence-based teaching that changes lives, and that goes on to 18.

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The Not-Yet-Developed World: Investigating the Parallels between Adolescence and Modernity

Oliver Robinson

This article takes a different and developmental slant, questioning the use of the word 'developed' applied to modern societies and suggesting that we are in fact in an unstable transitional phase on the way to greater maturity of outlook.

'This is no place to stop – halfway between ape and angel.' Benjamin Disraeli

OUR WORDS COME to shape our world. They become the filters through which we make sense of reality and interpret our experiences. Sometimes it is useful to question our linguistic conventions, for in so doing we may learn to see the world afresh, with a new and better filter. Here I set out to question the word 'developed' as it is applied to the group of nations that have developed a combination of free-market capitalism, liberal democracy, and secular philosophical/scientific enquiry. By attributing this label to certain nations, including our own, we implicitly suggest that for us development is *over* – for the word is in the *past* tense. Conversely we see the 'developing world' as composed of nations who are still developing towards our model of socio-political adulthood, with our beatific hand outstretched via way of NGOs, development agencies and aid, in the same way as a parent helps and guides a child to their fully developed stature. The argument I present is that the current socio-economic model of westernised nations is *not* a developmental endpoint, but rather is an *unstable transitional phase* through which we pass, not where we arrive. I argue that modernity has clear parallels with the phase of adolescence in the individual, and that the last few hundred years of 'modernity' can be construed as a kind of collective adolescence. To equate modernity with adolescence is not to belittle it, for adolescence is a period of extraordinary, albeit unstable, growth and discovery, where adult powers emerge in a blaze of confused glory. Psychologists studying adolescence have highlighted key characteristics of the adolescent period – it arrives with the onset of *autonomous reason* or 'formal operations', is characterised by a growing *self-determination*, a preoccupation with *in-group* peer identity, rapid *growth*, *experimentation* with roles and ideologies, and by an overbearing focus on *self* and appearance. Parallels of all these basic characteristics of adolescence can be found to be characteristic of the modern era in the Western world, and to these parallels I turn now to expose the fallacious notion that the West's development is over.

The Arrival of Reason

For the individual, adolescence heralds the arrival of abstract thinking and the ability to reason hypothetically about a problem before it presents itself. This is referred to by developmental psychologist Jean Piaget as the onset of the *formal operational period*.ⁱ Prior to this period, the child is limited to 'concrete operations', which are thoughts applicable to concrete objects but not abstract ideas. One of the most salient features of the onset of the formal operational period is the way in which a child becomes able to consider the realm of possibility – of what *could* be the case, of what *might* yet still come to pass, while before he is she was anchored to what is, or what is not. The cognitive grasp of possibility brings the ability to have hypotheses and hunches about what might come to pass. The child also develops the capacity to form theories:

'The adolescent is the individual who commits himself to possibilities – although we certainly do not mean to deny that his commitment begins in real-life situations. In other words, the adolescent is the individual who begins to build 'systems' or 'theories,' in the largest sense of the term.'ⁱⁱ

The development of theoretical ability, through which concepts can be fitted together into descriptive and explanatory schemes, distinguishes adolescent thought from childhood thought. The new psychological capacities of the teenager give her the tools for developing into a human being who can individually, without guidance, solve problems and develop their own worldview. Rather than simply accept parental ideas or societal roles without questioning them, the adolescent can, through the exercise of logic, reason, and self-awareness, work out a path for herself, and develop a philosophy of her own, away from the received concepts of her culture and family.

In the same way as adolescence is the dawn of the rational mind for the adolescent, modernity is considered to be the *advent of autonomous reason on a general collective level* in the Western world, catalysed by the philosophers of the Enlightenment such as Voltaire, Kant, Paine and Rousseau, and scientists such as Newton. Prior to this age, independent

thought and questioning of established doctrines had never been considered to be a *collective* good; it was the domain of the elite philosopher or scientist, not the layman, even in the golden age of Athens. Modernity and the Enlightenment brought with it the first rebellious call for *all* to doubt, for *all* to ask and answer their own questions, to develop their *own* theories. This was new, revolutionary, and subversive. In 1784 Immanuel Kant was asked to define what the Enlightenment was. His answer used an analogy with individual development. He suggests that what he saw happening around him was an emergence from a collective childhood. He said:

'Enlightenment is man's emergence from his self-incurred immaturity. Immaturity is the inability to use one's own understanding without the guidance of another. This immaturity is self-incurred if its cause is not lack of understanding, but lack of resolution and courage to use it without the guidance of another. The motto of enlightenment is therefore: *Sapere Aude!* Have courage to use your own understanding!'ⁱⁱⁱ

Kant considered the philosophy of the Enlightenment as a strike towards a way of being that was free of dogma, of unquestioning orthodoxy and submission to authority. 'Dogmas and formulas,' he wrote 'are the ball and chain of permanent immaturity.'^{iv} Kant wrote further that the Enlightenment was *just the beginning* of social maturity and that an era in which all persons would and could reason effectively and autonomously would be a long way off. Therefore it is clear that while he saw the Enlightenment as a dawning of maturity, he did not see it as the stable form of maturity, but more as the first bold stride toward a form of collective being in which all people could think for themselves without fear of persecution.

Rebellion and the Search for Independence

Rebellion – the active repudiation of orders by those in authority – is a process that is an integral part of a healthy adolescence in order to separate from external control and develop a self-determined life direction and preferences. Similarly, on a socio-political level, the philosophers of modernity trumpeted the importance of non-conformism and of rebellion. J.S. Mill's seminal libertarian text *On Liberty* published in 1859 said: 'In this age, the mere example of non-conformity, the mere refusal to bend the knee to custom, is itself a service.'^v He accused those who merely accord unthinkingly with custom to be employing 'ape-like imitation' and said that human character can only manifest in making one's own reasoned choices, independent of social forces. Mill's argument for liberty is that society should allow individuals to go their own way, to rebel against convention and dogma, to explore their own truth, to experiment with alternative ways of being if the activity in question does not directly hurt or harm another. Such an approach is inherently insubordinate to those in authority. Other writers such as Elizabeth Chapman spoke of a 'general revolt against authority in all departments of life which is the note of an unsettled, transitional, above all democratic age.'^{vi} This was a dramatic moral shift from the religious philosophies prior to the Enlightenment such as Calvinism or Catholicism, which emphasised the importance of strict obedience to the authority of the Church as the basis for morality.

The modern era saw a severing of the bonds between religious orthodoxy and philosophy, allowing the rebellious messages of Kant, Paine, Mill and others to come to prominence without censure. The publication of *The Origin of Species* by Darwin in the same year as Mill's *On Liberty*, was

one of a variety of theories and discoveries that showed science to be a source of knowledge in which *all* could potentially participate, for Darwin was just a curious observer of the world, without ecclesiastical rank or university position. It showed that long-established doctrines were far from absolute. Pre-modern art was almost exclusively devoted to religious iconography, while modern art was freed to aesthetically explore whatever subject it liked. John Ruskin exemplified the new non-conformist, free spirit of art in the post-enlightenment world, saying that there are neither rules nor models for great art, and that artistic genius must 'shake itself free of what has come before'.^{vii}

The rebellious thrust of modernity had a further similarity to adolescence, for in both cases a *paternal* and *maternal* source of authority are rebelled against, and separated from. The paternal authority that is the focus of modernity's rebellion is embodied by theistic Judeo-Christian religion. Monotheistic religions of the West are patriarchal to the core. In these traditions, a male God, the 'Father', presides over an all-male church, with mostly male priests (also called 'Father') who are the Father's representatives on earth. The paternal control of the Church in the modern era was widely questioned and rebelled against in all areas of life as

...a general revolt against authority in all departments of life which is the note of an unsettled, transitional, above all democratic age. This was a dramatic moral shift from the religious philosophies prior to the Enlightenment such as Calvinism or Catholicism, which emphasised the importance of strict obedience...

modernity progressed. Secularisation of state, science, art and philosophy was a necessary corollary of the search for independence away from the paternal hand of the Church.

The female face of authority against which modernity rebelled is Mother Nature. The realm of the biological and the earthly is traditionally conceived of in most cultures as female; as the feminine face of the Divine,^{viii} the nurturing mother from which food and shelter is received. Her power over human society is manifest in the innumerable ways that nature can cause enormous damage and destruction on the development of human civilisations, by way of natural disaster or disease. Modernity not only set out to liberate human collectives from the Father of patriarchal theocracy, but also to liberate society from the threats of Mother Nature through the development of medicine and of innumerable technologies to buffer human society against her forces. And in order to fully reverse the power dynamic with nature, modern societies systematically went about exerting their new-found power over Mother Nature, climaxing in the ultimate expression of power over the Female, in the achievement of splitting the atom, as described by Rollo May:

'And here the mother symbol enters; we speak of *mother* nature. It is not a far cry from experiencing the achievement of splitting the atom as gaining power over the 'eternal feminine.' The atom bomb sets us into conflict with the symbolic mother. This is why the construction of the bomb carries such a personal symbolic power for almost everyone.'^{ix}

In the same way as the adolescent separates from the mother, modernity has separated human societies from Mother Nature, by way of urbanisation, industrialisation and protective technology. We have in the Western world developed the now unquestioned assumption that human species is *not* part of nature, having laboriously separated ourselves from Her over the last three centuries. Thus 'nature' programmes include anything but us.

Experimentation and Revolution

Adolescents attempt to solve the problem of integrating their personal desires with the pressures of society by way of experiments. These involve trial-and-error strategies of trying on roles, in-groups, personas, ideologies, fashions and activities, in order to build a frame of identity reference. Psychologists refer to the non-committal period of identity experimentation as a *psychosocial moratorium*.^x

The modern era can be considered a similar moratorium of exploration and experiment on a collective level. Mill described modernity as a time for certain more developed societies to attempt alternative modes of being, to allow many different truths to compete in a liberal epistemology, and to actively promote eccentricity and non-normative behaviour:

'As it is useful that while mankind are imperfect there should be different opinions, so it is that there should be different experiments of living; that free scope should be given to varieties of character, short of injury to others.'^{xi}

He suggested this experimental age would not be permanent, but would last 'until mankind are much more capable than at present of recognising all sides of the truth.'^{xii} And how human beings have made use of their moratorium! In a few hundred years, the industrial revolution, political revolutions, seismic religious revolutions, scientific revolutions, technological revolutions; political experiments of every kind; religious experiments galore, ephemeral fashions and fads, leading to a cacophony of plurality.

Growth

Only by way of constant growth can the body keep up with the successive revolutions within and without during adolescence, as the adult form attempts to break out of the child's shell. Modernity has a not dissimilar preoccupation with growth, particularly in the economic realm, to the point where the importance of economic growth is an unquestioned assumption. Success and economic health of corporations and nations is indexed exclusively by parameters that assess growth. National economies *must* grow to demonstrate health, and publically limited corporations *must* grow incessantly to retain share price. At the same time, the human population has been growing at extraordinary rates. In the early seventeenth century there were just four million living in the UK. In the middle of the eighteenth century, there were less than one billion people on the planet, now there are over six billion. The obsession

with economic growth, and the exponential growth of the physical mass of humanity is a parallel with the growth spurts of adolescence and the groans of the biosphere under the strain attest to these growing pains. Yet in the words of environmentalist Edward Abbey, 'Growth for growth's sake is the ideology of the cancer cell', for to grow incessantly without stabilising, without concern for the host upon which you grow, is indeed the nature of cancer. Infinite growth on a finite system such as our World is not possible. Our economic parameters of success will *have to* change from growth-based ones, it is just a question of when, and the global population *has to* reach a stable level. Economists are encouragingly moving away from growth indices towards indicators that assess success otherwise, such as indexes of collective happiness, or quality of life indexes for nations. In the last election, when the Green party suggested a zero growth economy, they were given short shrift, but they were in fact just ahead of their time. But not by much. When we reach a post-growth age, this will be a sure sign that our collective adolescence is over.

In-group Bias and Nationalism

While busy separating themselves from authority, adolescents are busy building inclusion with their peers by way of involvement in peer groups, dyadic friendships and romantic relationships. This requires the adoption of the modal dress conventions, linguistic conventions and typical activities of the 'in-group' with which the adolescent seeks to be merged. Those not in the chosen peer group, members of 'out-groups', can be the focus of hostility, intolerance and prejudice. Such hostile intolerance is considered to be a divisive but necessary identity-building strategy for the adolescent, who is taking tentative steps to build a more socially embedded self.^{xiii}

This process of in-group bias and out-group hostility is also paralleled in the developed world, for with the Enlightenment and the birth of capitalism came the nation state. The geopolitical map before the modern era was a hodge-podge of city states, principalities, kingdoms and empires. The nation state as an idea was arguably the brainchild of Cardinal Richelieu in eighteenth century France, whose philosophy of *raison d'état* proposed that a state is obliged to do anything serve its own needs and to maintain its independence. France was threatening to be submerged under the Catholic Holy Roman Empire, and religious affiliations suggested that France, a Catholic country, should side with the Empire. Instead, Richelieu put his nation above his faith, and so went to war with the Empire. It was a manifesto of national self-determination that was arguably necessary, but certainly not sustainable. Nationalism has arguably led to social cohesion within nations, but it has simultaneously led to xenophobia and a lack of international co-operation, for nations, in order to feed the self-esteem of their inhabitants, espouse their superior qualities and disparage others as alien and inferior. Einstein called nationalism an infantile disease. It is in fact a macrocosmic parallel to the social identity process that the adolescent manifests so intensively. The nationalist mentality divisively separates the world into *us* and *them*, and while it may seem to our limited minds that the nation-state, with its monopoly on legitimised violence,^{xiv} is the natural way of organising social units, it may be just a passing phase. Ian J. Hackett, in his little book *The Spring of Civilisation*, suggests exactly that:

'Patriotism is no more than an immature emotive force, succeeding tribalism and imperialism in the evolution of our civilisation, a force which cannot feature in a

completely civilised world. Nations, like the city states and empires that preceded them, are not the end-product but only a passing phase in the development of world civilisation.^{xv}

The trans-national organisations that have existed since the Second World War to deal with issues that transcend national interest, such as the UN and the EU, and frameworks of international law, are evidence of the first steps towards a less adolescent basis for international relations, but their wishes often run contrary to individual nations, whose primary concern is still their own gain. This is highly reminiscent of the challenges for the individual in early adulthood; to retain one's hard-won adolescent freedoms while making concessions and buying into collective values to social aid integration and cohesion.

Progress or Regress?

The modern age, bringing with it extraordinary changes, upheavals and social experiments, has had its evangelical exponents and its trenchant critics. Freedom is the prize we have garnered from modern society – freedom of thought, freedom to travel the world, freedom of character, freedom to vote, freedom to marry who we will, freedom to get the job that we want. However in the words of psychologist Gail Sheehy, 'autonomy equals aloneness',^{xvi} and indeed while we are have been freed from the collective yoke to forge our own lives, we are at the same time cast adrift from a collective in order to work out the problems of existence for ourselves. The byword of modernity is 'independence', which is dialectically opposed to 'togetherness'; more of one means less of the other. Modernity has led to a progressive alienation of the individual. This sense of solitude and alienation has led to the habitual reliance on drugs, alcohol and media escapism to periodically release people from a sense of purposeless and solipsism. We have lost wisdom, if wisdom is defined as the philosopher Will Durant did, as seeing things in view of the whole.^{xvii} We see the world in pieces and competition – this worldview is reinforced through Darwin and Dawkins, through

market economics, and the language of rights divorced from responsibilities. It is understandable that critiques of modernity have emerged in response to this fragmenting vision, and these critiques have suggested regressive or progressive solutions to the psychological, political and ecological problems with the modern way of life.

The regressive solution is typified by fundamentalist religion – a twentieth century phenomenon that came about as a direct reaction to the problems of modernity^{xviii}. Fundamentalists perceive the liberal values and materialist emphasis of modernity to be malevolent and corrosive to the social fabric. They are critical of the attempt to consign religion to the periphery, and so withdraw from society into an enclave of pure faith. This reaction is a regression to a prior phase of religious certainty, of literality of scripture and unquestioning orthodoxy. Following the developmental analogy, fundamentalism is like a parent attempting to re-assert rigid parental control in the face of an experimental, confused adolescent. Rather than allow the child their experimentation and rebellion in order to emerge into equilibrated adulthood afterward, the parent attempts to regain control over the child's life, demanding continual obedience to authority.

The preferable parental response to an adolescent is a generosity to accept the mistakes that occur in the face of tumultuous change, in the knowledge that the transition will come to an end,^{xix} and a progressive way of being will be found. The same can be said when seeking a cure for modernity's ills – the regressive solution may be reasserting rigid control of individuals, but its oppressive and controlling nature will lead to frustration and misplaced anger amongst its converts. A progressive direction is more complicated as it is a *new* solution – a way beyond what has yet been achieved or thought up. A progressive solution would what is best in modernity, while remedying its shortcomings, rather than rejecting it in favour of a prior developmental phase.

The opportunity presents itself in this argument to infer what a progressive solution to modernity might look like, by exploring analogies with what comes after adolescence for the

NEW ONLINE SPECIAL INTEREST GROUPS

In December, the Network launched six online special interest groups for members only, hosted by Google Groups. The six groups are:

- (1) Transpersonal Psychology and Consciousness Studies
- (2) Philosophy of Science and Religion
- (3) Subtle Energies Theory and Research
- (4) Cosmology and Quantum Physics
- (5) Holistic Medicine and Healing
- (6) Parapsychology and Paranormal Science



Over 200 members have already joined the groups. To learn more about these groups or to subscribe to any of these groups, please go to the following webpage

<http://www.scimednet.org/groupsubscribe.htm>

and follow the simple instructions. Alternatively you can access the groups via the Members Circle of the website. If you have any questions about the groups or have any problems subscribing, please contact Olly Robinson on olly@scimednet.org

individual. A key characteristic of the post-adolescent adult is the demonstration of what is called *generativity*. Generativity is a lived concern with establishing a positive legacy for the next generation. On a collective level there has been a callous disregard for our legacy on future generations – our economic model is quite patently unsustainable for multiple generations or even for the whole world. There are growing calls from many corners of society – economics, business and management, agriculture, foreign and domestic policy – for a sustainable vision and a form of human development that can be sustained for generations to come, rather than one which is destined to fizzle out in an ever-increasing frenzy of growth and waste. Clive Hamilton, in his book ‘Growth Fetish’ reflects that the dawn of a post-growth society will perhaps be the time when we realise our human adulthood:

‘The transition to a post-growth society will be just as far-reaching as the transition from feudalism to industrial capitalism or from industrial capitalism to global consumer capitalism. It will fundamentally transform power relationships, social institutions, our relationships with others, our ethical rules, our attitudes to the natural environment and, ultimately, our consciousness.’^{xx}

Beyond adolescence, a young adult is more likely than the adolescent to develop a relationship with authority that is based on a healthy, open, respectful interaction. Equally for human society as a whole, our impending adulthood could see the development of a harmonious and mutually enhancing relationship with the paternal and maternal archetypes of the cosmos. The theology of Buber^{xxi} and the transpersonal theory of Ferrer^{xxii} point towards the *mutual* relationship of God and *homo sapiens*, by placing us as co-creators in the cosmic game, rather than passive recipients of Divine orders. Meanwhile, we have for the first time managed to separate from Mother Earth by way of space travel and manned space stations. In a recent documentary about the International Space Station, the Canadian astronaut Chris Hadfield gives a wonderful description of the permanent crew on the space station, that emphasises their new-found autonomy from Mother Earth:

‘What struck me most about the crew that’s living there was to see them view Earth as a separate place, Earth is something completely separate from *them*. Its an interesting step, I think, for humans to get to the point where you are now separated from your Mother and starting to view yourself as more of a single and separate entity.’^{xxiii}

It could be that the genuine separation from Mother Earth prompts the start of a relationship of mutual respect as opposed to an antagonistic one, much as the adolescent leaving home often prompts a more harmonious relationship with parents. Russell Schweickart, an astronaut, talked of realising a profound sense of interconnectedness in space. He realised when doing a space walk that he was merely a ‘sensing element for man’, and that he was ‘a piece of that total life’.^{xxiv} The experience of being in space, separate from Mother Earth, seems to give astronauts an insight into a new and wiser way of seeing. Perhaps they had a preview of what one day all people will consider common sense. Our children’s children may look back with a bemused amazement at the narcissism, change and confusion that ripped through the eighteenth, nineteenth and twentieth centuries, and be thankful that it was just a passing phase, that *homo sapiens* was just growing up.

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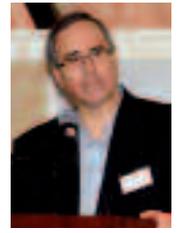
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The State of Global Emergency



Ervin Laszlo and David Woolfson

If the preceding articles have provided various perspectives on the state of the world, this piece represents a call to action. Here we present the first part. You can endorse the Declaration and find a summary of the principal recommendations contained in 'Worldshift 2012: The Handbook of Timely Change' on www.clubofbudapest.org – the document also contains a summary of the major global trends and challenges of the 21st century.

Preamble

WHEREAS the global financial and economic crisis; worldwide climate change; on-going wars, terrorism and nuclear brinksmanship; peaking or exhaustion of non-renewable natural resources; approaching water crisis; annual net increase in world population by approximately 80 million; increase in world poverty, homelessness and famine in absolute numbers; growing gap between wealthy and poor both within and between nations; and other interrelated macro-trends, provides growing and indisputable evidence that the world today is fundamentally unsustainable and that humanity is rapidly moving to the breakdown of currently operative societal and ecological systems.

AND WHEREAS notwithstanding these global-scale crises facing the human community, the thinking and actions of the majority of political and business leaders remain fixed - on the short-term rather than the long-term; on national rather than global priorities; on self-interest rather than community interest; on confrontation and militarization rather than cooperation and dialogue; on the values and consciousness of the 19th century rather than the 21st century; on maintaining the status quo of 'business as usual' rather than shifting to urgently needed new economic, energy and social systems - locally, nationally and internationally.

THEREFORE in awareness of these growing global crises and the on-going lack of needed national and world leadership in the mainstream of politics and business, we hereby issue this urgent call for action, as a "State of Global Emergency Declaration", on behalf of and for the benefit of all the People of the World.

The Global Emergency Declaration

The global-scale crises before humanity today affect every person and every society. If we continue on our present unsustainable path, by mid-century the Earth may become largely uninhabitable for human and most other forms of life. Such a total systems-collapse could also occur much sooner, due to runaway global warming or other ecocatastrophes, and/or by nuclear wars triggered by religious, ethnic or geopolitical conflicts or over access to diminishing natural resources.

The related global macro-trends have been apparent for many decades and are now building toward a threshold of irreversibility. The scientific modelling of complex systems shows that when systems reach a state of critical instability, they either break down to their components or break through to a higher order of integral functioning. At these "points of no return" maintaining the status quo, or returning to a previous mode of organization and functioning, are not feasible.

Time-estimates of when the 'point of no return' will be reached for the global system of humanity have shrunk from the end of the century to mid-century, then to the next twenty years, and recently to the next five to twenty years. For example, it was predicted that the Earth's average temperature will increase by about 3° Celsius by the year 2100, then it was said that this level of increase will come about by the middle of the century, and lately that it could possibly occur within a decade. The figure for overall warming has been increased from 3° C to 6° C or higher. Global warming of 3° C would cause serious disruptions to human activity, while a 6° C rise would be a 'global breakdown' making most of the planet unsuitable for human life.

These predictions, however, take only one trend into consideration: global warming; water availability; food



Southeast Asia if West Antarctic Ice Sheet melted (5.2 meter / 17 foot rise)

production; poverty; population pressure; air pollution, etc. This approach fails to consider the impacts of the interconnection of the macro-trends as well as the feedback loops within them. When one trend reaches a critical point its impact on other trends can be very significant. For example, if global warming creates prolonged drought in some areas and coastal flooding in others, starving and homeless masses will flood less hard-hit regions and create social and economic upheavals there with critical food and water shortages.

The acceleration of critical trends and cross-impacts among them indicates that the 'window of opportunity' for pulling out of the present global crisis and breaking through to a more peaceful and sustainable world is likely to be no more than four to five years from the end of 2008. This is close in time to the Mayan 2012 prophecy for the end of the current world.

The period around the end of 2012 is likely to be a turbulent one for this and other reasons. Predictions coming from the physical sciences foresee disturbances in the geomagnetic, electromagnetic and related fields that embed the planet causing significant damage to telecommunications and impacting many aspects of human activity and health. For the esoteric traditions the end of 2012 will be the end of the known world, although the more optimistic interpretations speak of a new world taking the place of the old.

While the majority of the world's people have yet to recognize the possibility of a total global-scale breakdown, millions of forward-thinking groups and individuals have been addressing the threats and challenges for many years. This 'waking up' is a positive sign of the vitality of the human spirit and its ability to respond to the dangers that face humanity with flexibility and creativity. It must be furthered and facilitated in all appropriate ways as the scale and urgency of the required transformation is far greater than the scope of current efforts. It will be a case of 'too little, too late' unless the human community as a whole moves quickly to address the threatening macro-trends before they become irreversible.

This must now be our top planetary priority. Failure to implement a worldwide shift in the window of time available to us will almost certainly lead to the breakdown of our civilization and possibly to the demise of our species. We acknowledge the real possibility that a child born today could witness the final chapter of modern man's 200,000 year existence on this planet.

The Way Forward

If humanity is not to perish, as other species have that failed to respond to their changed conditions, we must face and creatively cope with the unintended consequences of the narrow and short-term thinking that has led to today's unsustainable global situation. No 'quick fix' or 'miracle technology' will save us from the consequences of the misguided values and actions of the past. Only by engaging the human spirit in all its creativity and potential wisdom can we give birth to the necessary new thinking and actions.

The currently dominant mode of thinking cannot be maintained any longer. We must overcome the societal inertia generated by the powerful, self-destructive remnants of bygone eras in order to prepare in each region, nation and community for systemic disruptions and possible collapses. We must radically reconsider our view of the world and re-structure its principal operative systems: energy, economics, governance, transportation, food, resource use and distribution, among others. We must act to extend the window of time available to us before it becomes too late to avoid breakdown on a global scale.

Every crisis harbors within it the opportunity for change and transformation. The ideas and designs for the needed new systems, structures and technologies already exist. Today we are rediscovering essential elements of the wisdom inherent in the world's great cultural traditions and making important scientific discoveries regarding the nature of reality, our connections to each other and to nature. At the same time we are developing alternative energy sources, sustainable technologies, global communications and information flows, biotechnology, nanotechnology, artificial intelligence, and other technologies capable of paving the way toward global sustainability for human communities and the environment.

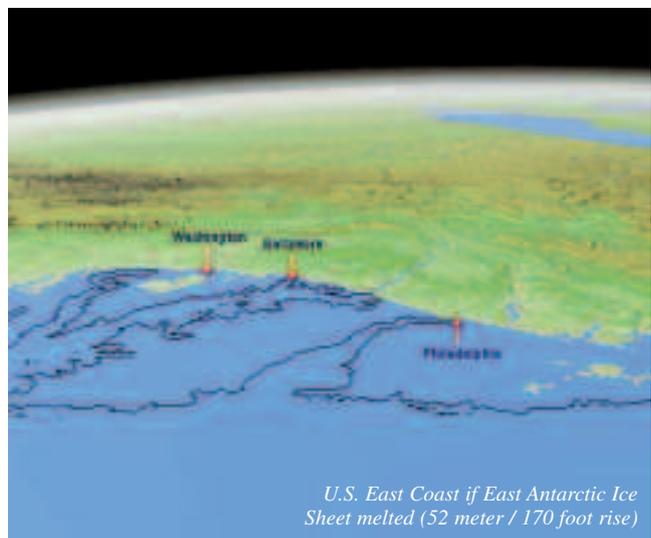
Our new thinking and new tools can accelerate the emergence of a new world in sufficient time to avoid the 'worst case' scenarios - if we act now. Time is short and the task unprecedented.

Effective and feasible solutions to the present global emergency must be brought to the attention of as many people as possible, as quickly as possible, to motivate urgent and effective action by all aware and responsible global citizens. Widespread communication and collaboration amongst people, nations, cultures, religions, societal sectors, professions, associations, networks, organizations, and other groups, is essential to ensure humanity's survival on this planet.

The new Club of Budapest report Worldshift 2012 – The Handbook of Timely Change advances a feasible whole-systems concept for the urgently needed epochal shift. It is a 'Worldshift - a worldwide shift from a path of unsustainability, conflict and confrontation to a path toward global sustainability, wellbeing and peace.' The Report's proposals for achieving this Worldshift, together with the proposals of the Declaration's signatories, form an integral part of this document.

ACCORDINGLY, WE HEREBY ISSUE AN URGENT CALL to all the People and Peoples of the World to declare their awareness of the state of global emergency and their firm commitment to join together to carry out real and meaningful change in all sectors of society (education, governance, economy, media, culture, technology) and at all levels (local, national, and global) for the common good of all people and all societies, and all life on Earth.

(The list of Signatories of the Declaration will be published immediately after its formal adoption following the Global Emergency Consultation.)



U.S. East Coast if East Antarctic Ice Sheet melted (52 meter / 170 foot rise)



The End of Science

Anthony Judge

Readers will recall this story from the early autumn. Here Anthony Judge reflects on the ways in which we try to settle differences by comparing the incident with an earlier one in a very different context.

Introduction

On 16th September 2008, the Royal Society of London for the Improvement of Natural Knowledge as the oldest and most eminent body of science, forced the resignation of its Director of Education, Michael Reiss (Royal Society statement regarding Professor Michael Reiss, *Science News*, 16 September 2008). The latter had proposed the inclusion of creationism in the science curriculum in schools (Creationism call divides Royal Society, *Guardian*, 14 September 2008). In 1210, the University of Paris, the most eminent academic body of the time, made a declaration with papal authority to the effect that any person presenting the works of Aristotle to students, or found to be reading such materials, was to be immediately excommunicated.

The following is an exploration of the parallels between these two events and the implications of the action of the Royal Society for the future of science. *Any assumption that this argument is a defence of creationism would be to misunderstand its intent completely.* Nor, however, is it an argument in support of the widely-discussed secularist positions of those such as Richard Dawkins (*The God Delusion*, 2006) or Christopher Hitchens (*God Is Not Great: How Religion Poisons Everything*, 2007) — whatever may be the merits of their specific arguments.

This is an exploration of intellectual censorship and the impoverished quality of thinking that results. In particular it is an exploration of the inherent inadequacy of scientific thinking as taught at a time when there is a call for cognitive skills capable of responding creatively to differences of opinion within science and in society at large. The science that has not learnt how to handle differences, except by excommunication, is clearly of questionable relevance to the most challenging issues of society — especially those reinforced by an 'us and them' binary logic.

'End of Science' vs 'End of History'

In 1992 Francis Fukuyama produced a controversial study suggesting that history has reached a culminating point with the emergence of a perfection of social organisation represented by liberal democracy (*The End of History and the Last Man*, 1992). The advent of Western liberal democracy was seen as signalling the end point of mankind's ideological evolution and the final form of human government. A different exercise was undertaken by the senior editor of *Scientific American*, John Hogan (*The End of Science: facing the limits of knowledge in the twilight of the Scientific Age*, 1997).

Fukuyama's argument is of course questionable — and has indeed been questioned — but it is the questions that it

raises, and the capacity to do so, that are more interesting than any particular answers. And in 2008, it is not clear that liberal democracy is the ultimate solution to the challenges that it readily assumes to be an aberration from that perfection. However, as perhaps demonstrated by the non-democratic institutional response to the Irish 'No' vote (on the EU Reform Treaty) and the many instances of electoral manipulation in democracies, one might hope that democracy itself could evolve into a more appropriate process.

The point is not whether science has failed to be marvellous in many respects or to have revealed intellectual marvels which are much to be appreciated. The problem is whether these marvellous capacities are to some degree, deliberately or inadvertently, used as a 'fig leaf' to disguise inadequacies which are systematically denied — notably by the most eminent academic authorities.

The question then is whether the assumption that 'science', or the 'scientific method', has reached its culminating form is inherently problematic — as with the assumption of the University of Paris in 1210 with respect to religion. Are there no inadequacies to science that call for innovations in its methodology or approach — or imply their possibility? Is the future precluded from such innovation by a cognitive approach that is to be considered as having reached perfection? Is there a questionable pattern that underlies both the scientific method of today and that of the religious authorities of the period of the Declaration of Paris in 1210? By what method would this be determined?

Challenged Capacity to Handle Differences

Although not a question of science, the history of science is replete with examples of shameful treatment of innovators in science — whose merits are subsequently extolled as an exemplification of the scientific method. Institutionalised science does not address these issues scientifically — leaving their resolution to problematic dynamics which are equally evident in the wider issues of science that science fails to address. In this context this might indeed be termed scientific Darwinism, as though there was no better mode. Institutionally such transformations are framed *post facto* as 'scientific revolutions' without being able to address those currently emerging.

Whilst this is the case with respect to many innovators individually, somewhat similar processes occur on a larger scale with respect to the relationships between disciplines — notably as determined by a form of long-recognised 'pecking order'. Science has been unable to apply its methodology to the relationships between disciplines. The arrogance of

some, and the marginalisation of others, has long been remarked – although neither arrogance nor marginalisation are concepts recognised by many of the sciences in question. There is little insight into how revolutions in thinking might be handled with greater elegance. In this sense science has little to offer those faced with bloody revolutions in wider society – a matter of irrelevance to science.

What is it that inhibits the capacity of a discipline to handle differences? Is it that the integrity of the discipline is such that differences are necessarily intolerable – especially when they are of a more radical nature? What then of the capacity for radical theoretical innovation? How does this compare with the coherence and integrity that religious authorities feel obliged to defend by every means possible?

Future Methodological Capacity to Handle Differences

As emphasised above, this argument is not a defence of creationism. It is in defence of a methodology that might have been assumed to be scientific but most clearly is not. That methodology is perhaps best framed as critical thinking, namely the capacity to listen to arguments from any perspective, without prejudgement, to weigh their significance and to determine a creative mode of response (*Web resources: Critical thinking vs. Specious arguments*, 2001).

Conventional science, because of its very conventions, holds the view that the argument against creationism has already been completely made to the point of justifying its exclusion from any curriculum – to guarantee the healthy education of young scientists. However, curiously, the argument for creationism is so problematic that consideration of the evidence for it is seen as a contamination of appropriate education in what is known to be true. It is difficult to fail to see the parallels with the attitude of religion in its reaction against the emergence of science. If you already know and possess the truth any alternative claim to truth must necessarily be false and justify whatever sanctions are appropriate. In that sense, has science reached its equivalent to the famous Galilean moment – claiming already to know what it would understand through any cognitive discipline as yet untried?

Curiously also, education in the scientific method is seemingly held to imply exposure only to pre-masticated arguments that have been certified as healthy for young minds. This is reminiscent of what is deplored as dogmatic education on the part of religious authorities. There is no question of educating people in the capacity to deal with unfamiliar materials to enable them to develop the cognitive skills to work out under what conditions they may serve some purpose in the eyes of those who defend that perspective.

This is itself curious in that many scientific subjects are presented in terms of the history of theories that have been successively abandoned and are typically framed as obviously ridiculous – whatever the eminence of those who propounded them at the time. Interesting examples are the concept of ‘ether’ (which ironically has to some extent re-emerged in the context of astrophysics) and the case of Isaac Newton. To the eternal shame of science, it has been unable to comprehend why a person of such genius attached credence to views – on alchemy and the like – that are now disparaged by many who would not presume to equal his capacities. It has even sought to conceal his interest in such matters.

The argument here is therefore that it is not so much creationism that needs to be on the curriculum but rather a full spectrum of extraordinary views currently upheld in society by some constituencies – in preference to those upheld by science. Only by exposure to those views, and how arguments are made in support of them, can students acquire an understanding of the relative merit of science as it is conventionally conceived. If science is to be relevant to society, and to avoid alienating many who are more convinced by alternative views, it needs to engage with the processes whereby such convictions are formed and sustain their integrity. It is not sufficient for society to act like religion and to simply propound the Truth by fiat – and to condemn those who fail to subscribe to it to some form of excommunication, or intellectual damnation in a nether cognitive hell. Implicit in the position of the Royal Society appears to be a requirement that the Authority of science be accepted by its students unquestioningly – or that only the right kind of questions should be asked.

Indeed, in addition to creationism, some creative thinking could be devoted to the variety of cognitive modes from which students might fruitfully learn, whether or not conventional science immediately emerges as the most credible. As a mirror of society, the spectrum of such modes might even be understood as a form of ecology of the collective mind that merits honourable consideration – however diseased it is subsequently judged to be (*Memetic and Information Diseases in a Knowledge Society: speculations towards the development of cures and preventive measures*, 2008). Other modes of explanation might indeed include traditional modes of knowledge (including shamanism), astrology, alchemy, modes favoured traditionally by other cultures (notably the *feng shui* of China), and modes favoured by disciplines held to be highly questionable by the natural sciences (such as psychology and mythology). These might include the unusual submissions that are the delight of every patent clerk – and possibly the original inspiration for Einstein (*Einstein's Implicit Theory of Relativity – of Cognitive Property? Unexamined influence of patenting procedures*, 2007).

It is surely appropriate as the part of any education to enable students to understand why approaches understood as ‘alternative sciences’ by their proponents, and those intrigued by them, are so assiduously framed as pseudosciences. The general point has perhaps been best made by Susantha Goonatilake (*Toward a Global Science: mining civilisational knowledge*, 1999) as discussed elsewhere (*Enhancing the Quality of Knowing through Integration of East-West Metaphors*, 2000). Extraordinary perspectives surely merit careful preservation as an

What is it that inhibits the capacity of a discipline to handle differences? Is it that the integrity of the discipline is such that differences are necessarily intolerable, especially when they are of a more radical nature?

educational test bed. How else would thinking be developed to enable dialogue with politicians – especially those holding dangerous radical and extremist views, so readily labelled as ‘incomprehensible’?

Indeed a creative educational approach would be to invite students to present alternative modes of knowing for consideration and discussion. As it is, the Royal Society is reinforcing a precise imitation of the behaviour of fundamentalist religious groups who exclude as totally inappropriate any mode of knowing that does not reinforce their predetermined worldview. Within any one religion, the consideration of the perspective of any other is considered totally inappropriate. Alternative perspectives are necessarily to be condemned as misguided and worthy of sanction. In repeating this pattern, is it any wonder that a scientific education is inadequate to the challenges of society and to handling emergent differences intelligently and proactively?

As commentators have noted with regard to the forced resignation of Michael Reiss, it would appear that establishment science is now in a state of paranoia and defensiveness – which may indeed be terminal. It would appear that scientists are now seriously lacking in self-confidence if they are incapable of engaging with those holding other worldviews and have clearly failed to engender the requisite thinking skills so desperately needed in wider society, as argued elsewhere (*Guidelines for Critical Dialogue between Worldviews*, 2006).

Beyond ‘Science’ — the Search for ‘New Thinking’?

Is it then to be expected that there will be an evolution in cognitive capacity ‘beyond science’ in quest of the ‘new thinking’ for which many plead? Clearly scientific methodology, and the educational processes favoured by the Royal Society, are not equipped to engender such new thinking. Indeed, just as science is locked into a particular theory of ‘evolution’ it might be argued that it is locked into a particular understanding of its own evolution – again a form of methodological Darwinism, but with no sense of what the future may bring. Such thinking even precludes the kinds of surprising advances in understanding for which science purports to seek

Is it possible to envisage a cognitive modality ‘beyond science’? Or is the current scientific method to be understood as holding until the end of time? How might such a new modality be framed, if only speculatively? Where might one look for reflection on such matters – given that science alone cannot be expected to engender it?

One approach is to consider the process that the Royal Society has made evident through so clearly sounding the death knell of science. Science emerged in response to restrictive cognitive patterns exhibited by religion – exemplified by the Declaration of Paris of 1210. Science has gone through a complete cycle to the point of implementing the excommunication specifically identified in that Declaration – a cycle of 798 years. In so doing it has effectively gone through a process of *enantiodromia*, taking on the characteristics of that which it originally opposed and from which it broke away. However religion has itself evolved in curious ways to the point that creationism, for example, is now a more credible mode of belief for many than science. Science, like any particular religion, has as yet been unsuccessful in persuading the ignorant multitudes of its relative merit – although deeply committed to doing so as

vital for the survival of humanity. There is an elusive truth to the dynamics of this common pattern that may offer a key to whatever is ‘beyond science’.

Is it possible that the fundamental cognitive difference between science and religion could engender a new mode of thinking that partakes appropriately of both but transcends their respective constraints? Again this is not an argument for creationism or intelligent design. *This is an argument for a more creative way of responding to difference, to relative ignorance and to the dynamics of disagreement.* Arguably this is more relevant to the challenges of the future than science and religion separately, especially given their incapacity to resolve these very issues within their own disciplines.

Conclusion

Although this argument is entitled the End of Science, it is – as pointed out with respect to any End of History – a simplistic framing of the challenge. However science is itself guilty of just such simplicity in so readily promoting the belief in the End of Religion. Both science and religion are challenged by the encounter with such mindsets. Both have adopted simplistic modes of response that are an honour to neither of them. More interesting understandings of ‘end’ in that connection are those associated with the horizon effects of such topological paradoxes as the Moebius strip or the Klein bottle. History might indeed note the paradoxical irony of an ‘end of science’ heralding the ‘end times’ scenarios of religion – whose methodology it had so strenuously disparaged.

Curiously it is religion, or less well recognised branches of theology, that points to subtler cognitive modes that might be said to be more open to the tremendous possibilities of an unknown future. This more fruitful cognitive posture is to be found in apophasis (as originally recognised by Aristotle) and apophatic theology – in contrast with the kataphasis characteristic of both religion and science. Apophasis is the recognition that conceptual closure is appropriately to be avoided under certain circumstances – notably with regard to the possible nature of divinity and even to any understanding of personal identity (*Being What You Want: problematic kataphatic identity vs. potential of apophatic identity?*, 2008). The modality favoured is what has been termed ‘unsaying’, namely indicating what a phenomenon is not (Michael Sells, *Mystical Languages of Unsaying*, 1994) and avoiding premature closure. It is possible that the ‘new thinking’ that will emerge ‘beyond science’ could benefit from such recognition of its own methodological limitations – rather than becoming locked, once again, into the forms of arrogance commonly characteristic of both religion and science. And it is ironic that science has trapped itself into premature closure despite the elegance of studies on the probabilistic theory of truth sensitive to both perspectives. Perhaps one way forward is for science to articulate guidelines for critical dialogue with alternative perspectives, as suggested elsewhere (*Guidelines for Critical Dialogue between Worldviews*, 2006) – and to encourage those with whom it engages to do the same.

*Anthony Judge, formerly responsible for the development of the online **Encyclopedia of World Problems and Human Potential**, now best described as an independent researcher, mainly publishing on www.laetusinpraesens.org – where a somewhat extended version of the above article is to be found.*



Darwin and Religion: A definitive web resource

Denis R. Alexander

A short article introducing the new electronic Darwin archive.

WE SHOULD BE very thankful that Charles Darwin (1809-1882) did not live in the e-mail era. Instead he exchanged letters with nearly 2000 correspondents in the course of his life, and a massive collection of originals or copies of 14,500 of his surviving letters has been collected by the Cambridge University Library Darwin Archive. The Darwin Correspondence Project coordinated by Dr Alison Pearn aims to make these resources more widely available.

With 2009 marking the 200th anniversary of Darwin's birth, as well as the 150th anniversary of the publication of his *Origin of Species*, the 'Darwin industry' shows no signs of running out of steam, and the Darwin Correspondence Project is preparing many new materials in readiness for the double centenary.

Fifteen volumes of Darwin's letters have already been published by the Cambridge University Press, taking the correspondence up to 1867, but this only represents the halfway mark, and it will be many years yet before print publication of all the letters is completed. The Project has therefore been developing extensive web-resources, to be found at www.darwinproject.ac.uk, a site now containing around 5,000 transcriptions of the letters, many as yet unpublished, together with interviews, articles and other useful materials.

Darwin corresponded extensively with notable scientific figures such as the geologist Charles Lyell, the botanists Asa Gray and Joseph Dalton Hooker, the zoologist Thomas Henry Huxley and the naturalist Alfred Russel Wallace. Darwin also maintained widespread contacts in Britain and overseas with gardeners and nurserymen, diplomats, clergymen, army officers, colonial officials, and naturalists, who provided him with observations on the fauna, flora, and peoples of the world. No less than 200 of Darwin's correspondents were clergymen, and a significant proportion of his letters address questions of science, religion, and wider philosophical issues.

A recent grant awarded to the Darwin Correspondence Project by the John Templeton Foundation is now being used to develop a 'Darwin and Religion' section of the web site that includes folders on Darwin's views on topics such as design in nature, his own personal beliefs and the boundaries of science and religion. A wealth of other valuable materials have already been posted, including the correspondence of Darwin with the Presbyterian Asa Gray, Professor of Botany at Harvard, representing a collection of around 300 letters exchanged over the period 1854-1881, half previously unpublished. In addition, a rare collection of Gray's reviews first published in book form in 1876 under the title *Darwiniana* has also been posted.

A further feature of the 'Darwin and Religion' section of the web site is a series of interviews with experts in the field of Darwin studies. An interview with the philosopher of biology, Tim Lewens, is already available, and other conversations with Simon Conway Morris, James Moore and Randal Keynes will be appearing shortly, together with review material addressing Darwin's own thinking on key elements in the science-religion debate.

An innovative initiative, closely tied in with development of the 'Darwin and Religion' web site, is the dramatisation of the Darwin-Gray correspondence. The letters were given to the dramatist Craig Baxter who developed them into a script, now available in the 'Design' section of the web page. The Cambridge-based Menagerie Theatre Company were employed to develop and produce the theatrical production, and two performances were staged in March as part of Cambridge University's Science Festival program. A full performance was also filmed by Cambridge Media, and excerpts edited for a podcast available on the web site.

With 2009 marking the 200th anniversary of Darwin's birth, as well as the 150th anniversary of the publication of his Origin of Species the 'Darwin industry' shows no signs of running out of steam...

One of the particular charms of this wonderful correspondence is the kind and gentlemanly manner in which it was pursued. From Darwin: 'My dear Dr Gray. I really hardly know how to thank you enough for the very great trouble which the list of close species must have caused you. What knowledge and labour and judgment is condensed in that little sheet of note-paper!' When later on Gray the devout Presbyterian and Darwin the wavering agnostic, chose to differ on whether or not evolution displayed purpose and design, the differences were explored in a spirit of free enquiry and polite discussion, a type of dialogue sadly lacking in some of the acerbic exchanges on the same topic that characterise our own day.

The Darwin-Gray dramatisation has received a very positive response, leading to requests for future performances. A

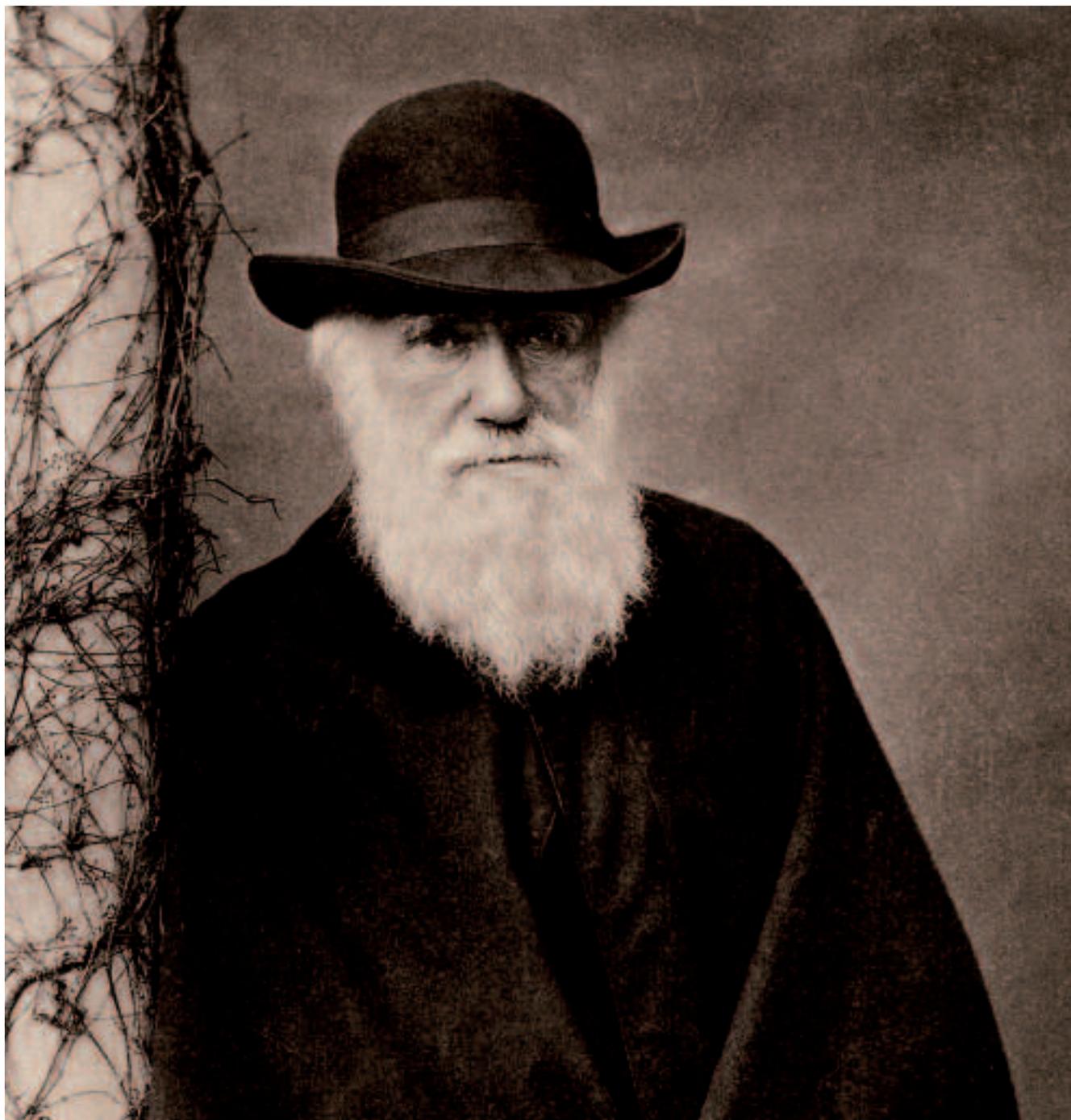
shorter two-actor version, more appropriate for small audiences, was performed this past summer at the science and religion conference in Lancaster, UK, marking the retirement of Professor John Hedley Brooke, and also at the Templeton Journalists Fellowship Program in Cambridge, and the Cambridge Science Summer School. Performances in the US in 2008 are currently being planned. There will be one at Cornell University as part of their Darwin Day event, and major performances are planned to take place in Boston, also in February 2008, to coincide with the meeting of the American Association for the Advancement of Science.

On 18 November 1859 the Revd Charles Kingsley wrote to Darwin, thanking him warmly for Darwin's kind gift of an advance copy of the *Origin of Species*, saying that 'All I have seen of it awes me' and then making a comment that Darwin liked so much that he quoted from it in the Second Edition of the *Origin*: 'I have gradually learnt to see', writes Kingsley,

'that it is just as noble a conception of Deity, to believe that he created primal forms capable of self development... as to believe that He required a fresh act of intervention to supply the lacunas [or 'gaps'] which he himself had made.'

Kingsley's warm endorsement of Darwinian evolution within a theistic framework set a trend which continues to the present day. The Darwin Correspondence Project provides fascinating resources to all those with an interest in both Darwinism and the 19th century science-religion debate. Get to know Darwin the letter-writer – you will not be disappointed.

*Dr. Denis Alexander is Director of the Faraday Institute for Science and Religion, St. Edmund's College, Cambridge (www.faraday-institute.org) and Senior Affiliated Scientist at The Babraham Institute. This article first appeared in the John Templeton Foundation's electronic publication, **Milestones**.*





A Participative Spiritual Inquiry

Wrekin Forum/Scientific & Medical Network
March 3rd – 6th, 2008

Joycelin Dawes

Earlier this year, members of the Scientific and Medical Network participated in a participative spiritual inquiry, organized by Wrekin Forum and with support from the Blaker Foundation. The Scientific and Medical Network interest in this inquiry springs partly from our work in the late 1980s with David Bohm's 'dialogue'. Participative spiritual inquiry also aims to bring people together in small groups to generate open and honest dialogue that can lead to deeper levels of knowing and community. This inquiry brought together three strands of potential for this kind of work: exploring new ways of knowing and new ways of connection through 'deepening spiritual connection' that inquires into each word of this purpose – deepening, spiritual and connection; practical experience of learning how best to use one of the many new 'social technologies' gaining more common currency today; in opening the inquiry, one of the facilitators observed that 'There is a new dimension to this thing called reality and we need to look to see what we can do to bring this new understanding to the world.'

A cycle of inquiry starts from a shared interest of the participants

who frame their interest as a question, then devise and carry out an activity that seeks to explore the question. Participants report back on their experience and outcomes of the activity, and thus consider collaboratively what they have learned and how this might be integrated into future actions. Participants learn the method and skill of inquiry with two experienced initiating facilitators, who, as the inquiry progresses, 'die' in the facilitation role in the group, as the group learns to self-manage and self-direct.

The Blaker Foundation were interested to support the inquiry as it offered a practical learning in a structured and rigorous way for people to discover and put into practice new ways of perceiving the world and of living their lives. It opens horizons and enables participants to explore and develop all dimensions of their experience - practical, emotional, spiritual, intuitive and intellectual.

As you read the report that follows, you will see that the inquiry has been successful in enabling this group to experience a high degree of trust, honesty, coherency and depth, which was experienced as real connection. This came from hard work, and willingness to recognise and lay aside

taken-for-granted defences and responses to difference and diversity.

Wrekin Forum is planning new inquiries, initially open to their Associates, and they will bring the first group together again to take their inquiry further. When a group reaches what became called 'common ground' it is important to realise that this is only an initial phase, not the end-point. If participative inquiry is really to demonstrate how groups can work collaboratively from a transpersonal and shared field of experience, this has to be grounded and anchored. This is long-term work.

Longer-term funding of new groups is a challenge. Although each inquiry will become self-supporting, there are set-up costs, for skilled initiating facilitators as the group learns self-management and to cover Forum overhead costs of developing the project.

Further information or interest in supporting the project: Wrekin Forum, Courtyard Lodge, Mellow Fm, Hawcross Lane, Redmarley d'Abitot, Glos GL19 3JQ tel: 01452 840033 or email: info@wrekintrust.org

Report compiled by Joycelin Dawes,
on behalf of Wrekin Forum
(joycelindawes@aol.com)



The Common Ground Report

A Participative Spiritual Inquiry held March 3rd-6th, 2008

This body of this report is compiled from the reflections of the 16 participants. Their 'voices' are alternately in normal and italic type. Process observations are in boxes

'We arrived. We began – introductions, some explanation from our initiating facilitators, Bryce Taylor and Kathryn Fitch. We thought we were starting at the beginning. Well, you do, don't you – conventionally that is – in linear fashion.

But participative spiritual inquiry is a cyclical method. It felt as if we started somewhere, went round a number of circles, then began to realise what we were doing, what was happening – learning on the job, experiencing and doing, and reflecting on it. Eventually, we discovered that each new cycle – each somewhere – was a prelude to going more deeply together, of challenges, frustration, and opacity opening to clear light. Then, there we were – really somewhere, together, as one, exploring the heart of developing deep dialogue together, each in our uniqueness, one in our common ground.'

The 16 of us were very different, all with a way or paradigm of understanding our life in the Spirit. Through successive cycles of, muddling-ly, wondering if what we were going through was spiritual experience, we eventually reached a point late Wednesday afternoon, carried forward to Thursday morning, when, collectively, we designed an inquiry into how we might deepen our spiritual connection. We agreed an activity that would test this, carried it out, reported back on our experience of it, its meaning, how that impacted our spiritual understanding and what we learnt from it.

We came to see that we were on 'Common Ground'; that we held and valued an 'open space' amongst us; it needed to be held collectively in a clear light free from individual perceptions, but from which we each share. The group, I think, experienced themselves reaching a unified transcendent space, holding a clear, grounded collective intent in which agreement came so much more easily.

The group became one of peers, facilitated itself and the initiating facilitators 'died' to become part of the group.

'Collaborative spiritual inquiry was new to me and I found both the process, and what happened to this particular group, enlightening and full of wonder. This whole person learning process was considered important enough to require everyone being present throughout; and I discovered I really didn't want to miss out on anything! So a requirement became willing and joyful. A safe environment was created by the facilitators and the group. The quiet joy and feeling of peace I experienced when we had come through the tangle of muddle, separation and darkness, into a clear space of underlying union, was indescribably beautiful. I felt the relief of knowing that staying with what happens in the moment, however difficult, leads to clarity and vision. I learned a lot during the three days – but am aware there is a great deal more to learn about this new way, as being salutary both to individuals, groups and thus further afield.'

I joined the group to become different through learning rather than accrue more learning. I changed through the process and realise:

- We don't have to create spiritual experiences, just recognise ourselves within them; BE them, not just have them. We were the living inquiry – the issue, problem and solution*
- We have to take responsibility for what's created and develop the ability to respond*
- There is potential within tension - in tension we can find intention*
- We can be the Destroyer, Creator and holder*
- Group agreement and conformity are not the same or as powerful as group intent*
- There is unity in diversity.*

Individually connecting to a higher group intent enables everyone to connect to a more powerful source, to 'be' and contribute themselves – we enable each other to be who we truly are; We are doomed if only connecting from the personality level as we only allow each other to be who we want and expect others to be.

This, for me provides great hope for the future of mankind and is the bridge between the old and new paradigms in terms of work to be done through groups and leaders in the world.

'The experience we had together seems to defy rational analysis because, collectively, we surrendered the rational through a painful and frustrating struggle through which we found a space beyond where knowing was replaced by meaning. This 'place beyond' has, hitherto, been the province of the religions and described by mystics variously as 'the cloud of unknowing', Christ Consciousness, Buddha Mind, the I Am Presence etc. Amongst our discoveries was the sense that this space is real (we seem to have termed it common ground) and there is a great sense of love and joy when we connect with it individually. When we connect collectively, as we did, I think we re-discovered a way forward for humanity in these transitional times.

I am fortunate to be in a few group situations where we choose to be in this space together, but I haven't experienced before the struggle to get there and the surrender of all identity and difference in order to reach this field of unknowing in which other dimensions of awareness can break through. This field is authentic, it lives in the moment and it can be trusted if we are willing to give it our trust. Clearly we are not the first to discover this but I hope through the process of morphogenesis that with each

evolutionary step we take so it may open up a space for others to do the same.

The Arthurian myths seem to hint at how each of us goes forth on the Grail Quest for wholeness and, having found our own individual connection, we return to the round table to find discover collective insight and to band together to offer collective leadership to Camelot. Maybe it is through the soul connected higher mind that we receive higher awareness and then somehow pass this to the more concrete lower mind to process and operationalise. This is where maybe an ongoing collaboration between Wrekin Forum and the Network might be useful – learning how to perceive through the eye of the mind and the eye of the heart and then integrate the two.

My own learnings seem to have been:

- That true spirituality has to be authentic
- That we can only reach it through surrender of all that we think and think that we are
- That it swims in a field of unconditional love in which 'greater love hath no man than this – that a man give up his life for his friend' (I hope I get it!)
- That other dimensions of being are real and await our connection to take us there.

Quite what is the deeper meaning of the golden anchor I saw descending between us during the final meditation I am not sure but the golden chain reaching into the heavens was solid and strong. I look forward to another time of being with everyone and await where this might lead us.'

A process observation: we were told in the first session by Bryce that sessions would start on time with whoever was there.....what a relief! How many frustrations have I suffered from turning up on time and having to wait till everybody was there! I noticed during the 3 days everyone was on time because (it would seem) they *really wanted to be there and not miss out!* this for me, if nothing else, was a proof that this whole process was very, very worthwhile – and that working with the fogginess of not entirely understanding, was worth 'being with'....until it moved, of its own volition, to a less foggy view.

What did I learn?

- *When to speak and when to remain silent*
- *That to be silent is to participate*
- *To recognise myself in others*
- *To trust the moment and to risk not knowing where it leads*
- *To witness the process yet be part of it*
- *To hold the thread of focused awareness throughout a labyrinthine journey*
- *To keep going through the not knowing*
- *To be aware of the common ground underlying apparent differences*
- *To watch a small seed germinate, gain strength, and grow*
- *To trust that the group has an intelligence of its own*
- *To participate in an alchemical process of transformation*

'My strongest learnings were more to do with meanings than with feelings or the imaginal. As an example, I went for a walk every morning, and on the first was rewarded by seeing the very last sliver of the waning moon, visible just before sunrise. The thought of entering the period of dark moon for our inquiry kept recurring, filling me with assurance that our dark not-knowing would be under the guidance of the moon. This then affected how I worked, or rather, how I perceived my part in our working, in the group. Increasingly often, as we progressed, I found myself in a state that I imagine surf-board riders to be in, balancing on the cusp of an onward wave where my movements and the wave's were one. It required constant attention. Words dissolve into paradox: it combined relaxation with unceasing activity, constant control with complete letting go of control, full personal responsibility with total acceptance of the group context. The techniques and ideas I learned were also of immense practical help, but it was this experience of living in a new way that now stays with me.'

Life will give you whatever experience is most helpful for the evolution of your consciousness Eckhart Tolle.

'This is exactly what the inquiry did for me. It is difficult to put into words, experiences that are very transformative, and garnering the insights and learnings takes time. But you just know that a shift has taken place. So there are deep personal learnings from it, but also the knowledge that we achieved something quite profound together. I learnt that to be at the creative edge, is where deep

learning takes place, as well as understanding how a group can find higher ways of working together. What is it that a group can do together that individuals cannot? We can come into a collective emergence.

So full authentic participation in a group, with a conscious intention, is to co-create. I learnt the strength of authenticity and the immediacy of being at the creative edge, and that in the space of the common ground, that we created, even though there are differences between us, an energy becomes available to us, that has a deep creative flow.

This inquiry has contributed to the development of my own consciousness, and hence the collective consciousness, as well as to the creative development of group collaboration. It takes us forward individually and collectively.

'The experience brought to me a real sense of belonging which I have not felt before though I have often thought about it and known it to be possible. This I feel was brought about by the invitation to authentic expression which the process of the cooperative inquiry encouraged and was so evident in the later stages of our time together. I will carry with me the feeling of unity which we all created as the common ground. I am grateful too for the opportunity to practice the facilitator role in such a supportive atmosphere. This has, without a doubt contributed greatly to my gradual overcoming of the fear of speaking and enabled a step change in how I handled a talk I gave on the evening of our final day. I am left with the impression that the process of cooperative inquiry will be a great tool in the future for handling the opening of awareness in an atmosphere of equal voice where no-one can dominate to the disadvantage of others.'

Being safe: a safe environment was created. This safe environment brought forth such feelings and voiced thoughts as, it is OK to be a destroyer, because I know there will be a creator coming afterwards. The quiet joy and feeling of peace when we had come through the tangle of muddle, separateness and darkness, into the clear space of an underlying union, was indescribably beautiful... and brought forth in me a sense of relief too – if I hang on in there long enough, dawn will emerge...

When I stopped trying to make this event into the 'head' experience that I had been expecting and instead went with the group's flow, I then got from it instead a 'heart' experience - a powerful feeling, which has also stayed with me so far since, of love for the group, for my life and for life, and a gratefulness that all is very well.

At my 'head' level, I have been particularly impressed with how this group process mirrors life, in particular I see that in both:

- One of the most valuable things that I can give to others is to be fully present to them and not withdraw if the going gets rough or I lose interest*
- The group and life goes where the energy is, and I need to not give away my power, dithering to find a right moment to say/do something, as by this time the energy has often moved elsewhere,*
- I need to approach experiences open-mindedly, rather than through of my frames of reference*

This has all led me to renewed efforts at chopping the wood and fetching the water of my daily life with a new level of mindful intent.

I had had no time to prepare so had no pre-conceptions, expectations, stress or baggage. I did have confidence that: the group would go through considerable angst, resistance and struggle; Bryce would guide the journey without taking anything away from it; I was committed to being present and to use my energy purposefully; everyone had volunteered to be there and was spiritually intentioned so this was a resource; I had no investment in the outcome. I got exasperated by what I perceived as middle class politeness and little peer accountability holding up the group's progress, but this turned out, I think, to be useful.

The real learning, for me, lies in what I think was a surrender of some kind which came over us to the degree that we didn't really notice until we noticed there was something going on. We reached a place of no-one or the group having an agenda big or precious enough to get in the way. We all found a way of bringing our conscious intent together to invoke something different to what we were all used to. We gave to one another so that we might, together, find something new and richer to explore.'

3 – 6 March 2008; dates in the diary. Anticipation. Participative inquiry? Do I like this facilitated process; these tram lines for my behaviour? Finally! We phrased an inquiry as, what is the experience for the individual and the group when we intentionally create common ground? Simple intention; simple act - powerful result! I don't think it is too much to say 'heaven arose.' I could analyse it further; I could deconstruct it, but I choose not to. Its preciousness is in my recollection of its integrity as an experience. I have been living with the consequences of this ever since. I feel the on-going expansion like the ripples-from-the-stone-in-a-pond image, but instead of the ripples diminishing, they are gaining in wavelength and frequency!

The inquiry brought us to transcendence because it integrated self-and-other into one. I learned transcendency is a paradox; I examine self to lose self; I understand by seeking to understand not. Meaning is that which comes from inside – anything imposed from without is fundamentally an illusion. Once I understand from inside, I can use my intention to share my portion with the whole and truly participate. Knowing

about and experiencing Individuation in Oneness is different. I prefer experience.

'This four day experience presented me with a method of profound group potential for change and spiritual leadership. A very rigorous system of negotiation, discussion and counter agreement revealed so much, not only of our individual blockages but the group blocks, and even humanity's (as macrocosm). This testing process opens up experience of difference, stuckness, acceptance, growth and emergence, and a real deep respect for each group member as they experience the burning ground together and ultimately transformation.

The point of change to group creativity and with this the birth of a new receptivity and the acknowledgement of shared other dimensions meant a new learning could emerge.'

It is fascinating to be in a space of detachment and see things objectively and feel attuned with others in excitement of discovery or rediscovery! Despite the high Octane intellectual fireworks and plethora of debates, the process of inquiry and spiritual quest has touched my heart and mind, opening new windows of connecting



with strangers in more ways than one. The buzz word is simple, it is love. I have continued feeling an encompassing feeling of love all around me, still... integrating humans and all beings into the periphery of 'love zone' It is very beautiful feeling. In our non contract downsizing technocratic world, our meeting was wonderfully connecting in such a short space of time; a new emotional surge in my ribosomes tells me that after all we are all connected in very deep level, we just need to find it within a ground of openness, acceptance and love.

Making a proposal: An example might be: 'I propose that we spend the next 30 minutes discussing what it means to be really 'in' in this group'.

Anyone can make a proposal which is then voted on by the group: raising your hand means Yes, lowering it means No, halfway means Not sure – the low/halfway hands have then to be individually checked out. Depending on what is shared this will decide the next step; e.g. after clarification or discussion is the person willing to change their lowered hand to a raised one? If enough do this, the Proposal may then go ahead. As we learnt the process, we used the principle that the proposer then took responsibility for guiding the conduct of what was proposed. If not, it is dropped. (NB: important to be absolutely honest or you end up with something you don't want!)

Since I sent to you my initial reflections upon what I learned in our time together as a group, I have had the chance to watch the process deepen and develop. The feeling of recognising myself in others is still there, especially as I read the many wonderful contributions which have been circulated. The sense of keeping going through a time of not knowing has stayed with me, through a few days of intense activity. It has been like riding a huge wave of energy, while striving to remain steady, focused, and watchful.

For me, the most enduring memory has been of the widening of vision that took place, taking us beyond our frustrations, stuckness and irritation. The shared awareness of a common

ground worked its magic. We did not have to bring it into being, it was there waiting for us to wake up to its presence.

'I have had a mantra/phrase in my head and heart for many many years...

'I will not give myself fully until it is the real thing.'

"For me, where we got to at the end was and is, the future way of living. By any other name, we landed in heaven, we inhabited the heaven, the common ground of heaven, that has always been present. A new way of collective Being in the world and because of that, we will really make a difference in all areas of our lives, I feel sure.'

I found this journey quite a struggle to start with. In truth I had not read the paperwork properly, otherwise I would probably not have gone. Perhaps it was meant that I did not read the papers because I would certainly have missed out on a tremendous and valuable experience and learning curve. I had not appreciated how much of me was still stuck in perceptions and conditioning. I had always thought of myself as a good Aquarian, very detached and able to see the wider vision. Those few days were to show me that there was still much of me stuck in the Piscean age and its resultant perceptions and structures.

Initially, I saw only the outer process and this I found very frustrating. Gradually, however, on the third day, the penny dropped and I suddenly became aware of something much deeper happening. I saw beneath the process. In essence I connected with the energy that was prevalent in the group and when this connection was made, it was as if something opened up within me. I saw the value of how groups working together like this could bring about so much needed change in our society. Above all, I understood that my fears, my concern, were groundless. It had all been about perceptions and conditioning that I had picked up since birth and these needed to go. I had lost nothing of value and instead had gained so much. Something within was released and I became free.

With this release and freedom, I was so conscious of the exciting possibilities that lay ahead with this type of group work. I suddenly realised that this was true Aquarian group work and that those like us were pioneers in visualising the freedom, the transformation necessary for a deeper spiritual connection in humanity.

Humanity needs to be free of the remnants of the Piscean Age and transform all its beautiful spiritual qualities into the visionary Aquarian Age. The Age where each human being will gain freedom from its own imprisonment and connect with its true spiritual nature.

It was a great privilege to do this journey with you all and I so much look forward to seeing you again.

The bell: this was a small bell and ribbon – the only object in the middle of the circle. It was there for any member of the group to use at any point when they felt we were off track and were not doing what the group had agreed for any given period. You were invited to pick it up from the middle of the circle and ring it. The proceedings then stopped immediately, and you said why you had rung it. It was a risk: would you have stopped proceedings appropriately? Would the person you had stopped speaking be angry? Would it help – or hinder – the group process as a whole?

'What is the emergence of common ground? We don't know where we are until we get there. And we won't get there until we know where we are going and that there is a we that is going and that the we is together - enough.

Straightforward, simple enough. How many times did we have to formulate our intent together before we almost got it fully into operation?

I know something of how long it takes to get 16 people's intent sufficiently aligned to bring about what they wish for cooperative inquiry teaches patience and the need to let the ego's reactivity burn up in the frustrations of learning how much we need it to be... (whatever way we believe it ought or needs to be)

Dreams, wishes, ideas, planning and intention - only when those last two appear do we get to bring about collective action – even if it is to dream collectively (is that a future challenge?).'

We are: Amit Biswas, Marolyn Burgess, Chris Clarke, Joycelin Dawes, Janice Dolley, Vince Dowse, Carol Duncan, Astra Ferro, Kathryn Fitch, Heather Giles, Ann Hellyer, Dave Hufton, Tessa Maskell, Denise Moll, Bernie Rochford, Bryce Taylor.



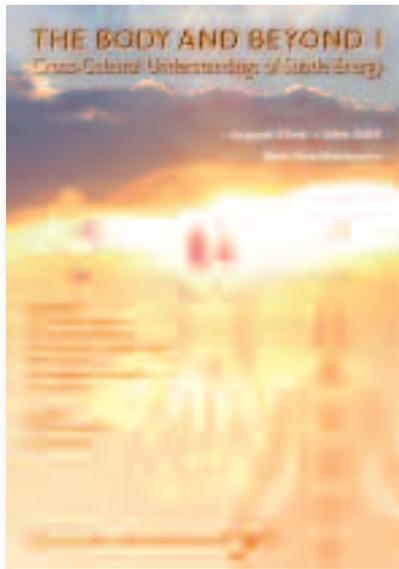
The Body and Beyond 1: Cross Cultural Understandings of Subtle Energy

Bath Spa University, 22nd - 24th August 2008

Robert A Charman

The West Downs campus, set in the rolling countryside of North Somerset with cows in nearby ruminative contemplation, was an excellent site for the subtle energy theme of this conference. The sun shone to greet our arrival on Friday evening and smiled on us again for most of Saturday, but by late afternoon the celestial effort proved too much and we lapsed back into cloud and some light rain.

John Clarke, Chairman of Council, opened the conference with a warm welcome to everyone together with an especially warm welcome to those attending for the first time. He expressed the hope that any non members present would join the fellowship of the SMN. On this subject he reminded us that, like so many small societies, membership remained relatively static and urged everyone to support the sterling efforts of Council by playing their part in spreading the word. **Peter Fenwick**, as President, then gave a short address in which he informed us that the latest exciting discoveries in neuroscience were leading to renewed recognition that mind, as an entity in its own right, could influence brain and was not just an end product of brain processing. Philosophically, this represents a return to the concept of mind to brain top down causation instead of brain to mind bottom up causation. John Searle, a leading philosopher who had, until recently, championed a bottom up approach has now issued a cautious re-appraisal in favour of the top down hypothesis. Consciousness involves the whole brain which can reprogramme its processing of sensory information to achieve a desired mental end. For example, when the blind explore the world using their hands their receiving visual cortex takes on a new role in processing the sensory input from their hands and associated arm movements to help create a three dimensional map of a world they cannot see.



David Lorimer, Editor of Network Review and Conference Chair, then opened the subtle energy theme of the conference. He reviewed the western approach to explaining the mystery of life by referring us to Aristotle's (384-322 BC) hypothesis of a vegetable soul, an animal soul, and a rational soul, and that we embodied all three. By the 17th C it seems that two of these souls had become lost in transit as the world was redivided by René Descartes (1596-1650) 'Father of modern philosophy' into a dualism consisting of the realm of the outer world of measurable physical extension (*res extensa*), and the realm of non measurable, non extended mind (*res cogitans*). Only humans possess mind because only humans can say 'I doubt, therefore I think, therefore I am' (*Dubito, ergo cogito,*

ergo sum). As animals cannot do this they have no self and are no more than instinctual automatons (You may strongly disagree with this criterion!). From the 19th century onwards the accelerating rate of scientific discovery, the scientific method, and related philosophy rejected dualism in favour of a one substance monism in which our sense of being a separate self is an illusion that dies when the brain dies.

Over the centuries, running counter to this scientific paradigm of mind-less nature, a continuing stream of western esoteric philosophy (esoteric – secret, mysterious knowledge, taught to initiates mainly through the language of symbolism, rites and magic) retained mind and soul as primary entities inhabiting bodies sustained by the *Ian Vital* or Life Force in mutual accord with the soul of the universe. David referred us to the physicist Raynor C Johnson's 1953 book *The Imprisoned Splendour: An approach to Reality based upon the significance of data drawn from the fields of Natural Science, Psychical Research and Mystical Experience* as a brilliant exposition of this paradigm (I would also include here his *Watcher On The Hills* (1959), based upon unexpected mystical and other worldly experiences sent to him by ordinary people. Each available through Amazon). Another important author was Robert Crookall who, notably in *Casebook of Astral Projection* (1964) proposed that the experiential bodily states of people varied accorded to the realm of universe they inhabited. In conclusion, David quoted from the physicist William Barrett's 1926 book

Deathbed Visions: Psychological experiences of the dying to the effect that such experiences imply we inhabit a realm in which we are all one with another. Following his talk the conference speakers then joined him to introduce themselves and the main theme of their forthcoming presentations. As a delightful and very much appreciated musical postlude David introduced James D'Angelo, professional pianist and sound therapist, who played Bach's *Italian Concerto* on the magnificent new piano recently acquired by the university.

Saturday morning commenced with **Dr Ornella Corazza** discussing *Near-Death Experiences: Exploring the Mind-Body Connection*. Dr Corazza took us through the typical experience of an NDE, including a tunnel, approaching a light, seeing relatives, maybe a godlike figure, maybe a life review, and then, at some point, receiving a command to return into their body as their life's journey was not yet fulfilled. NDEs possess an unshakeable reality that profoundly affects the rest of a person's life, including no fear of death. They are sometimes preceded by an OBE in which the person 'floats' to the ceiling, observing all below before entering the NDE. Studies have shown that about 11% of those near clinical death experience an NDE. Ketamine, an anaesthetic sometimes used as a recreational drug, can also induce an NDE type experience but it doesn't have the same sense of absolute reality. NDEs are not always near death phenomena as they can occur during dissociated states of dreaming, stress, and deep meditation. Much of Ornella's research was done in Japan where, as here, some NDEs are terrifying instead of beatific. For the Japanese there is no clear distinction between life and death, as the 'dead' continue in a permanent state of OBE/NDE and accompany the presently living. Body-mind is a continuum of 'betweenness' with no dualist separation. We are spiritual beings having a human experience.

After coffee **Dr Shigenori Nagatomo** presented research evidence for the existence of Ki in *Ki-Energy: Its Detection and Meaning*. Ki, or Chi, energy is the 'invisible body' of life force that animates the 'visible body' of gross anatomy from plants to man. In animals it flows along the meridians whose acupoints interact with universal Ki. It can be sensed when in the right state of awareness. Post war



Nicholas Goodrick-Clarke, David Lorimer, Clare Goodrick-Clarke

research in Japan, and later in China, was initiated by news that on being stimulated at an acupoint a blind patient felt a sensation of Ki that travelled at around 15cm per second along the traditional meridian line. These lines do not correspond to sensory nerve patterns. Ki flow was then electronically detected as flowing at anywhere between 3 - 48 cm per second according to the meridian, far slower than sensory nerve conduction. For example, it travels along the so-called Triple Heater line from 4th finger to shoulder at around 3-8 cms per second. Masters of Qigong can generate and project Ki energy through space. Dr Nagatomo showed a short research film in which, for the first experiment, a Qigong master, standing on one side of a transparent screen with his outstretched arm and fingers through a hole in the screen, aimed his Ki energy at a line of ten lit candles. After a few seconds the flame of the nearest candle bent away from his fingers and this effect then travelled along the line of candle flames. In the second experiment a metal disc, hanging motionless from the ceiling, started to rotate under the influence of projected Ki (there was a gasp of amazement as we watched in fascination). The healing effect of Ki was shown in slide pictures of stomach cancer cells in a Petri dish where the intestinal tissue in contact with them slowly separated away, leaving them porous and vulnerable to attack. Physiological monitoring of changes in bloodflow, heart rate, and body temperature in qigong masters indicate that intentional Ki is

controlled by the autonomic nervous system. In Qigong philosophy our bodies are open systems in continuous exchange of Ki energy with our environment, including with each other. When, for example, a person of high Ki enters a room he, or she, can energise those with lower Ki. Conversely, one can feel drained as a sick person absorbs your Ki. External space is not the uniform blankness of Newtonian theory, but has good and bad areas. The Ki from a polluted environment can poison our Ki, making us feel lethargic and open to illness, whereas the Ki from mountains, woods and streams can re-energise us.

Following lunch **Dr Gay Watson's** talk, entitled *Embodying Knowledge in Buddhist, Psychotherapy and Neuroscience* took us into Buddhist thought that emphasises right action and experiencing rather than intellectualising. Post Cartesian western philosophy has divided mind from body, thus creating an unresolvable dualism because, as neither possesses the properties of the other, they remain irreconcilable. In contrast, Buddhistic psychotherapy is based upon the concept of a mind-body continuum in which the six senses of the body (the 6th sense being intellect) are synthesised into a continuous embodiment of experiencing. An indivisible oneness. In practice, the psychotherapist must remain emotionally stable whatever he, or she, is hearing from a disturbed client because, if the client's fears become the therapist's fears, then no help can be given. A degree of non identification is essential. Modern

neuroscience research has demonstrated that the brain possesses astonishingly sensitive neuroplasticity to good or bad experiencing and, through therapeutic exercise including breathing, the psychotherapist can use this knowledge to help remodel brain function in favour of beneficial experiencing. In the brain there are 'mirror neurons' (nerve cells) whose activity at non conscious emotional levels enables the brain to inwardly 'act out' the observed or told experiences of another, have demonstrated that good or bad influences can be neurally embodied. Film, video, or observed real life violence empathically activates these neurones so that, in effect, the observer becomes the embodiment of the observed. Conversely, these same neurones help to form empathic baby and parent bonding. Watching a skill helps to develop that skill. By rejecting mind-brain dualism in favour of the oneness of experiential embodiment Buddhist psychotherapy aims, through active therapy, to replace bad experiencing with good experiencing.

After the tea break **Paul Hougham** introduced us to *Textures and Transformations: The Meridians of Traditional Acupuncture*. He opened his talk by giving us an update on the increasing acceptance of acupuncture in medical practice and the accompanying increase in undergraduate courses leading to a BSc or, as in his College of Traditional Acupuncture, a BA in acupuncture. Historically, acupuncture appears to have evolved in China many centuries BC. In the 3rd century BC Acumoxotherapy (Zhenjiu), involving the use of small, slow burning, herbal sticks placed upon acupoints had become widely practiced in the context of 'Nurturing Life' (Yang shen) through diet, meditation, exercise, sexual activity and social ceremony. The concept of 'Guiding and Pulling' (Daoyin) into the good life through prescribed exercises, leading to Tai Chi and Qigong, became common practice in both China and Japan. Acupuncture, first by using thin slivers of sharp bone, then needles, was practiced alongside moxa therapy, being inserted after the moxa had burned through. The traditional meridians and acupoints of Ki energy flow, linking the surface to the internal organs, were developed over centuries. They were based upon sensory experience instead of



Ornella Corazza, Peter Fenwick, Shigenori Nagatomo

anatomical dissection as the latter was banned. Acupoints are the open channels of Ki energy connecting the body in energy exchange with the universe. Although translated as 'subtle energy' a closer concept with Eastern thought is 'breaths' of change and transformation. The meridian system is where body, mind and spirit met in energy union. Acupoint therapy can remove energy blockages and restore wholeness of Ki energy flow.

After dinner many of us bravely ventured a 10 minute walk across the fields (umbrellas up) to join others in the welcoming interior of the Holy Trinity Church, Newton St. Loe, with its fine, 15th century Perpendicular west tower. On the left jamb of the south porch as you enter are two 'scratch dials' that acted as sun dials for the priest to check the time for Mass, and just inside is a complete list of Rectors down the centuries commencing with Francis de Stockley in 1297. We had gathered there to listen to a guitar recital by one of our members, **Catherine Thom**, who is a professional guitarist. Catherine, who was warmly introduced by Max Payne, then guided us through a selection of compositions from the baroque to the present, including a much appreciated composition of her own. At the end of her recital our applause shook the ancient rafters and we wended our way back to West Downs musically refreshed and in good heart.

Professor Nicholas Goodrick-Clarke opened the Sunday programme with a talk entitled *Wheels of Fire: the Assimilation of Eastern Subtle Body Doctrines in the Western Esoteric Tradition*. His historical review commenced with Pythagoras (circa 575-490 BC) a Greek mathematician and philosopher whose Three

Pythagorean Worlds theory formed the basis for western esoteric thought for many centuries. Pythagoras divided the universe and man into the Supreme Realm of Deity, connected to the spirit of the Thorax; the Superior, or Supramunda Realm of the planets, soul and cranium, and the Inferior Realm of the physical world of objects and bodies associated with the abdomen. A later philosopher Macrobius (395-423 AD) proposed that each soul descended through the heavenly spheres of the planets, taking on the characteristics of each planet before entering the unborn child. Robert Fludd (1574-1637 AD) proposed Zodiacal Man where the sun and planets connected to the heart and thorax respectively, with the Windows of the Soul open to Pure Mind (God), and Active Intellect (middle soul, rational spirit), in strong parallel with the Esoteric Anatomy of early Christian theology. Later translations of Sanskrit texts, Egyptian hieroglyphs, Mesopotamian scripts, together with the Kabbalah united a flood of Eastern and ancient esoteric thought with western esotericism. Through her travels and interpretations of Eastern thought regarding spirituality and the divine Helena Blavatsky (1831-1891) founded the Theosophy movement in 1875 and published her influential two-volume *The Secret Doctrine* in 1888. Charles Leadbeater (1847-1934) in his many books proposed that we passed through a hierarchical series of spiritual ascent from the physical, astral, mental, and Buddhist to Paranirvana. Later theosophical writers such as Sir Arthur of Avalon, Dion Fortune and Alice Bailey, emphasising karma, spiritual enlightenment, reincarnation and soul transmutation opened the floodgates



of 'New Age' therapies and philosophies including Caroline Myss, Deepak Chopra and, on a more medical front regarding healing, Larry Dossey.

After coffee **Clare Goodrick-Clarke** continued this theme through *Healing Agents of the Soul: Vital Force, Dynamis, Susceptibility*. While we understand the 'human' of 'human being' we are, she said, less sure what we mean by 'being'. Sometimes illness has meaning as an attempt to correct our lives because illness and health are aspects along a common continuum of being. Our biography becomes, in part, our biology, as our soul life enters deep into our organic processes. Western medicine works on bodies and parts of bodies, seen solely in terms of the pathology and repair of biological mechanisms, but true healing echoes Plato's dictum that 'the cure of the part should not be attempted without treatment of the soul'. Distress of the soul is often made manifest through the distress of bodily symptoms, and true healing

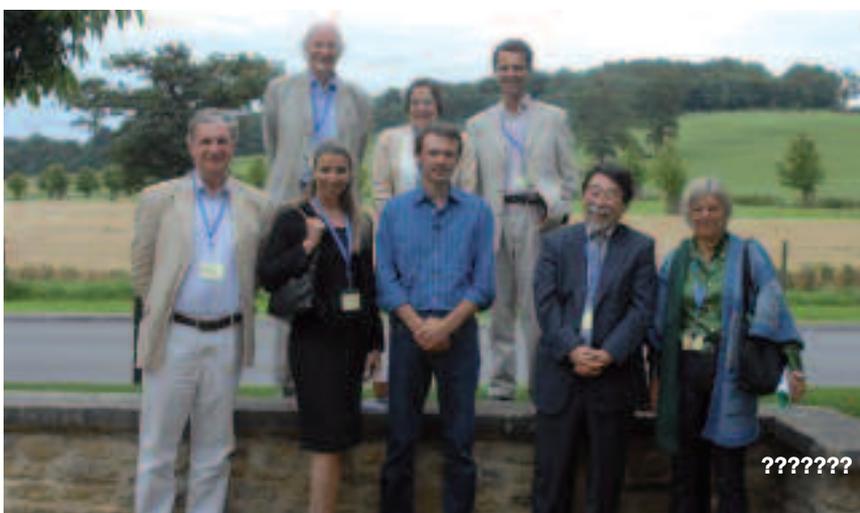
involves harmonious restoration of the Ki, or Vital Force, often assisted by the healing properties of plants and carefully chosen homeopathic remedies. The *vis medicatrix naturae* of Hippocrates (ca. 490-370 BC) Augmentation of natural healing Ki by increasing susceptibility to healing through magical presentation, is shown by the story of Sir William Osler (1849-1919) the charismatic 'Father of modern medicine' who, dressed in the swirling red cloak of a magician, visited a small boy in the almost terminal stage of smallpox, and sat by his bedside slowly peeling and feeding him a peach (almost unknown then). On his way out he told the parents to be prepared for the worst but hope for the best. The boy, against all viral odds, recovered. Clare supports Sheldrake's theory of morphic fields of reciprocating influence, and ended her talk with slides showing marked similarities of crystalline patterning between crystallised drops of tissue fluid from patients with particular illnesses and crystallised tinctured essence of plants used for healing same, the crystallising agent being CuCl_2 (copper chloride).

The afternoon session consisted firstly of small group discussions on particular topics such as Ki energy and NDEs followed by a final discussion forum with the panel of lecturers during which differing views concerning esoteric thought and its implications were expressed. Overall, the conference opened the minds of many of us to a world of esoteric philosophy whose paradigm of nature and the living body sustained by subtle energy flows, and mind, soul and spirit evolving upwards through other realms containing other Beings towards some ultimate nirvana is in complete

contrast to the pragmatic paradigm of scientific and medical thought. The philosophical dissonance between the two world views seems irreconcilable. You only have to contrast Richard Dawkins with, say, Deepak Chopra. For this writer esoteric philosophy, or philosophies, seem a matter of sincerely held belief systems about the nature of the universe, usually expressed in imaginative symbolism as in astrology, in which the search for evidence to support such beliefs plays little, if any, part. If esoteric thought was the prevailing world view it seems unlikely that our modern world of physics and chemistry, biology, DNA, evolution, the neurosciences, electronics, telecommunications, modern medicine, tectonic plates and astrophysics would ever have been discovered. This world is based upon factual data, scientific inquiry, testable hypotheses, and further inquiry in an endless cycle of exploration. Medicine, in esoteric thought, would still be based upon the concept of miasmas. Maybe the role of the SMN is to help bring the two worlds together in some form of constructive synthesis. In fact, it may already be doing just that through the *Network Review* and through the much appreciated conference bookstalls, one manned by our indefatigable Charla and the other by the good heartedness of Alan Shepherd, GreenSpirit Books.

Abiding memories? West Downs campus itself, conference camaraderie, the outstretched fingers of the Qigong master, the successive bending away of those candle flames, the slow turning of that suspended disc, and the plangent notes of a guitar in a country church that, like the theme of the conference itself, speaks to us of another world.

Robert Charman is a retired physiotherapy lecturer whose specialities were neuro-rehabilitation and biophysics. He was founder/chair of the Association of Chartered Physiotherapists in Energy Medicine and is Chair of the Confederation of Healing Organisations. He was editor **Complementary Therapies for Physical Therapists (2000)**; has published a review of EEG and fMRI evidence for direct brainmind to brainmind communication (*Journal for the Society for Psychical Research*, download www.spr.ac.uk), and articles reviewing the implications of psychical research on healing and theories of telepathy, remote viewing, psychokinesis and the relationship between brain and mind.
Email: bigbobcharman@yahoo.co.uk





Science and Spirituality

Annual Gathering 2008 of the German SMN Group

Dr. Stephan Krall (Kronberg)

From 15 to 17 August, 2008, 28 members and friends of the SMN met in Goslar (Harz) for their annual German meeting. In accordance with the objective of the SMN we chose the theme Science and Spirituality. Eight papers were presented followed by long and fruitful discussions. For the sake of brevity only some of them will be described here more in detail.

After a short introduction into science theory and the role of intuition by **Dr. Stephan Krall**, a presentation was given by the psychologist and philosopher **Dagmar Mundhenke** on the collaboration of Carl Gustav Jung and Wolfgang Pauli. The first, a famous psychiatrist and psychoanalyst met the second a no less famous physicist and Nobel Prize laureate during an personal crisis of Pauli. A long and fruitful relationship developed during which Jung learned a lot about physics and its new world view through quantum mechanics and vice versa Pauli opened his mind to a world beyond the material. They developed together the concept of synchronicity

and complementarity. Not much is known about Pauli in public and little is published and still available.

Dr. med. Gudrun Bornhöft tried to show us the difficulties of finding ways to prove immaterial and spiritual forces in the process of healing. From the four elements of Aristotle *causa materialis*, *causa efficiens*, *causa formalis* and *causa finalis* only the first two are recognised by modern science. The form-building force and the teleology are banned. Immaterial forces often do not follow a bottom-up principle, as stipulated by science, but a top-down one. Moderated, documented and qualitatively analysed conversations between patients and

experts could help to improve the understanding of such immaterial forces.

Whether nature is self-organised or not was the subject of **Robert Gansler's** presentation. Quantum mechanics and chaos theory show the self-organising forces of nature which can lead to processes of emergence of new patterns far away from the thermodynamic equilibrium. These new structures are open, unstable and always at the border of chaos. Nature is self-organised to a certain extent but there are always some steering programmes behind reactions, Robert claimed, from his background as an engineer.



The Speakers

Causality or final purpose (teleology) is one of the fundamental questions in nature. In contemporary science the concept of causality is the predominant one. **Dr. Stephan Krall** from his view as a biologist explained that this was not always the case and that many scientists, mainly biologists, were, until the forties of the last century, convinced that there must be a driving force or attractor behind processes in nature. This concept of teleology is widely unknown today but there are still some supporters and it seems that the concept is not so wrong as perceived in public. The truth lies obviously in the fact that both are right. There are many processes in nature which are clearly driven by causality but there are as well others which might be better explained by finality of teleology.

The biologist **Dr. Jens Tesmer** described experiments carried out by

Ciba Geigy scientists on the surprising influence of electrostatic fields on biological development. Due to those fields new and archaic forms of plants developed which appears as new (or old) species. Jens put forward for discussion the argument that the effect is probably not caused primarily through the electric field but maybe by new and unknown fields embedded in a spiritual field.

At the end of the meeting **Dr. Hans Hönl** tried to explain the spirit as an aspect of matter and therefore attempted to solve the problem of dualism. He as a chemist found very often during his professional career that biological reactions in particular are not easily explainable as caused by trial and error or accident. In his view, the interaction of elementary particles of matter brings about new entities which can be described as spiritual parts. They lead to

consciousness which is then an integral part of matter. Only highly organised matter can become what we call life.

On Saturday evening we had a special guest from a research institute in St. Petersburg, Russia. **Dr. med. Natalia Shareyko**, who reported on the practical aspects of the biosensory work of her institute. It is mainly on the ability of people to cause telekinetic effects. She demonstrated it by a video film from her institute and offered meditative exercises to the participants.

As usual the atmosphere of the meeting was characterized by harmonious discussions, a splendid ambience of the building and the park and rounded off by Qi Gong exercised offered by **Cornelia Krall** which demonstrated how man is stretched between heaven and earth, or let's say between Science and Spirituality.

Moon Face by Dr Carolyn Reinhart



Attention Members!

Personal Numbers and Office Procedures

Please help your administration office to run smoothly and so help you efficiently:

- when your details change (address, telephone number, email address etc.) please make sure we know
- use your membership number whenever you contact us, and write it onto all correspondence, conference booking slips, subscription forms, bankers order forms and orders for books, services etc.
- book early for conferences - it helps you get a place, and us get the tickets to you in good time
- ensure cheques are made out correctly to Scientific & Medical Network; for conferences and orders: always add (legibly!) details of what it's for and membership number on back, even when accompanied by a booking form
- remember we're a network, and it often takes time for all relevant people to be contacted so when making requests give us time to respond helpfully (and always remember to tell us who you are - we sometimes get forms back with no name at all!)
- help us save money; whenever possible pay in £ sterling and use bankers orders and gift aid for your subscriptions - it maximises funds available for more important things

Office hours are 9am – 5pm Monday – Friday and there is normally someone to answer the telephone between those hours, with an ansaphone otherwise.

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Network Manager: Charla Devereux

Subscriptions

Because SMN's accounting year ends in December, it needs subscriptions to be paid in January, before it incurs the cost of providing members services for the year. Regardless when you paid your subscription in 2007, your 2008 subs were due in January, and from then until the subscription is paid it will show in the membership records as owing. This causes administrative confusion in the office as well as affecting the timely receipt of your copies of Network Review until your subscription is received. SO PLEASE HELP US TO HELP YOU BY PAYING YOUR SUBSCRIPTION AS CLOSE TO JANUARY AS POSSIBLE.

NETWORK NEWS

Claudia Nielsen becomes a Vice-President

Claudia Nielsen was appointed vice president of the Network in Bath in August in recognition of her service and dedication over the last few years as both chair of the programme committee and vice-chair of the network. She is pictured here with a sculpture of the Buddha and Network Chair, Prof John Clarke.



SMN Blog News

The SMN blog is continuing to attract more visitors and more comments. The domain name is: <http://scimednet.blogspot.com> We are looking for more members to join the blog team. Being part of the blog team involves contributing short written items (200 words +) approximately once a month. If you are interested, contact olly@scimednet.org for more details or with an example post.

New Online Special Interest Groups

In December, the Network launched six online special interest groups for members only, hosted by Google Groups. The six groups are:

- (1) Transpersonal Psychology and Consciousness Studies
- (2) Philosophy of Science and Religion
- (3) Subtle Energies Theory and Research
- (4) Cosmology and Quantum Physics
- (5) Holistic Medicine and Healing
- (6) Parapsychology and Paranormal Science

Over 200 members have already joined the groups. To learn more about these groups or to subscribe to any of these groups, please follow the below link: <http://www.scimednet.org/groupssubscribe.htm> and follow the simple instructions. Alternatively you can access the groups via the Members' Circle of the website. If you have any questions about the groups or have any problems subscribing, please contact Olly Robinson on olly@scimednet.org

Network Online Recordings

We are offering a new service in the Members' Circle of downloadable mp3 recordings of recent conferences. Recordings are now online from Peter Fenwick's recent book launch lecture and this year's Mystics and Scientists. In addition, we have some classic talks including those given by E. F. Schumacher, Fritjof Capra, David Bohm and Bede Griffiths. The talks can either be listened to online or downloaded. All you need do is to visit the Members' Circle. If you have forgotten your password, you will find that you can send an e-mail to retrieve it.

Blaker Awards 2008 (for information please contact Ray Dawkins – raydawkins@fsmail.net)

- (1) **Saturday Symposia Series: Tough Talk on Tough Topics** from Paul & Charla Devereux, Ruth West. Funding for a pilot symposium to be aimed specifically at young people.

These talks will address a key question (philosophical, political, scientific, ecological) from different vantage points, sometimes diametrically opposed, sometimes simply from differing angles. Each symposium focuses on a single question. For example:

What is the Nature of Mind?

Beyond Death – What?

What Use is Evidence in Government Decision-making?

Is Religion Necessarily the Same as Spirituality?

Are Growth Economies Compatible with the Future of the Planet?

Is it Time for a New Politics of Food?

What Exactly is the Soul?

Do Ancient Societies and Beliefs have Anything to Teach Us?

Symposia are planned for Saturdays at the North Oxford Association Community Centre, a modern lecture facility capable of holding up to approximately 150 people.

- (3) **'Exploring the mind-body connection'** and **'Nourishing imagination'** from Ornella Corazza. Seed funding.

The purpose of these programmes is to introduce students and professionals to the problem of embodiment and help them to explore new ways to integrate their mind with the bodies. While recognising the strength of dualistic theories in Western Europe, the proposed workshops will show its limitations and open up to a non-dualist and non-reductionist way of conceiving human beings

A. Workshop 1: 'Exploring the mind-body connection'

B. Workshop 2: 'Nourishing imagination: working effectively to develop the creative potential in children and young people'



MEMBERS' NEWS



Rupert Sheldrake – morphlist@aol.com

You can subscribe to Rupert's monthly update, of which this is some of the latest:

In September, I gave the annual Tyndale Lecture at Lambeth Palace, the London residence of the Archbishop of Canterbury. The title was "Cosmic Evolution and Continual Creativity", and it is now online in streaming audio here:

<http://www.sheldrake.org/B&R/audiostream/index.html>

I have been trying to establish an automated telephone telepathy test for over a year, and finally the system is up and running. The details are at the Online Experiments Portal of my website at <http://www.sheldrake.org/Onlineexp/portal/>

As yet, the system only works in the UK, so if you live in the UK and have a mobile phone, please have a go, and encourage your friends and family to take part. Also, I am currently appointing Research Helpers to assist with this project, as described here: http://www.sheldrake.org/About/biography/pfund_helpers.html

This month's triologue has just gone online, and is part 2 of "Grass Roots Science" <http://www.sheldrake.org/Trialogues/index.html#grass>

Iain McNay – Conscious TV

'Conscious.tv is a new TV channel which is broadcasting as an Internet TV channel on www.conscious.tv. The three main areas that the channel covers are Consciousness, Healing and Psychology. The channel is particularly interested in showing and making programmes on subjects that are not covered on existing television channels. Conscious.tv aims to stimulate, debate, question, enquire into, inform, enlighten, encourage and inspire. If any members of Scientific and Medical Network have any ideas for programmes or would like to get involved in some way, maybe as an interviewee or indeed interviewer, then please contact Iain McNay on iain@conscious.tv'

Eric Maddern – Rare and Precious Earth

I've been working on a new CD over the last year and I'm pleased to tell you that it's now out. Called 'RARE AND PRECIOUS EARTH: Songs to Sustain and Restore the World' it is a vibrant and original collection of eco-songs, a worthy successor to the much appreciated, uplifting, family orientated 'Full of Life: Earth Songs for All'. The songs have roots in traditional folk and country, but there's a touch of rap, a riff of rock and roll, as well, of course, as the storytelling influence. It was recorded with John Lawrence of Gorky Zygotik Mynci fame. If you'd like to preview 'Rare and Precious Earth' you can listen to all the tracks on: <http://www.last.fm/music/Eric+Maddern/Rare+and+Precious+Earth>

William Bloom – Foundation for Holistic Spirituality

If you have passion for interfaith work, being a Voice for contemporary spirituality or being an activist for spirituality/love/peace, then please have a look at the early stages of a movement which we are all a part of in some way: www.f4hs.org (Spiritual UK, a project being enabled by the Foundation for Holistic Spirituality)



Nigel Anthony adds: My personal passions are the challenge of stepping up to be a clear voice for a holistic approach to spirituality - wherever religion is in society, we should be there also - and for creating a Spiritual Map of the UK which shows contemporary spirituality alongside religious & faith communities (check out Cardiff or Swansea on the map to see the start of this project).

Steve Taylor Poems

I've been writing the occasional poem over the past couple of years and have finally decided to post a selection of them on my website - many related to time - here's the link if you're interested: <http://www.steventaylor.talktalk.net/poems.htm>

LOCAL GROUP NEWS

Friends of the SMN, Auckland

LEO HOBBS 00 64 9 441 7402

In July we met jointly with the Auckland Branch of the Theosophical Society when **Robin Kelly** spoke. Robin is a local general practitioner who uses a synthesis of Eastern and Western medicine to form a modern mind-body approach with a focus on deep healing. In recent months Robin has been engaging with many in this field, and has had extended interviews with some US internet and syndicated radio shows around the content of the US version of his book, 'The Human Antenna', which has been adopted by an American publisher as a foundation text for the field of Energy Psychology.

After first entertaining us with his song, 'We All Let Go', about staying calm in the eye of the storm, Robin gave a sweeping survey of his approach to healing, referring to some of the many ideas on which he draws to inform his understanding of the human mind-body. These range from well-established scientific concepts to new areas where quite novel theories have been proposed. One such is the Wave Genetics hypothesis of Dr Peter Gariaev which links in with the concept of morphogenetic fields. Robin is enthralled by the patterns in the structure of the universe, from macroscopic cosmology to the minutest sub-nuclear scale, and sees these as manifestations of an ordering energy or information field which also controls our own bodily structure. The unity of this vast scale range is strikingly depicted by the ancient Oroboros figure, in which the snake's mouth at the macroscopic limit is shown swallowing its tail at the sub-nuclear limit, with the human scale positioned mid-way.

Robin summarised the principles he seeks to follow in healing practice, including the need for compassionate intent and non-attachment of the healer. Wherever possible the aim is for the patient to learn appropriate techniques after which they can practice self-maintenance.

In August **Ray Tomes** talked on 'The Wobbly Universe'. In the past he has discussed the theoretical aspects of cycles in the Universe. This talk was a more basic one covering only observations of cycles and vibrations from the largest to the smallest scales, and especially cyclical processes in human beings. We live in a world of cycles, of day and night, the seasons, monthly cycles, as well as the rhythms of breathing, heart beat, brain waves and other bodily processes. The world we live in is also subject to cyclical fluctuations, with climate being especially topical at present. Ice age cycles occur fairly regularly. The associated temperature changes have been much larger than those which can be attributed to human activity to date. However the precise effect of humans compared with that due to the sun and other forces remains uncertain so we need to do all we can to minimise our influence.

In September **Theresa Grainger** and **Denise Garner** spoke on 'Energy Psychology in Practice'. Both have extensive training in the application of Neuro-Linguistic Programming. In this largely experiential session they presented some practical suggestions to improve the quality and effectiveness of our thinking about ourselves. They referred to the language blocks we sometimes create through thoughts such as 'can't' and 'shouldn't' and they proposed release from these restrictions by counteracting with ones such as 'according to whose or what expectations?' and 'Is that me or a belief about me?' They outlined some accelerators designed to shift us into a forward focus such as 'What would happen if I could?' and 'What are some new possibilities?' and then some very practical transforming thoughts to change ideas into action such as 'What is within my power to act on now?' and 'How am I going to adjust my focus differently in the future?' We were invited to discuss our personal response to this material with a partner and then share further with the whole group some of the resulting important ideas. This was an informed, helpful, interactive, group session.

In October **Murray Stentiford** explored the subject of 'How Music Works'. He is well placed to do this because of his familiarity with the worlds of Science, Music, and Spirituality, although, from the start, he emphasised the need to follow the title with a question mark. He began with a practical

demonstration of harmonics in sounds of the voice, double bass and clarinet, and how their combination determines tone colour. The origin of musical scales was linked to the harmonic series in natural sounds. A reference to brain science looked at brain activation patterns in different states of consciousness, and the role of left and right hemispheres. Does the performer need to feel a specific emotion in resonance with the intention of the composer? How can we know? We shared the mystery of the bridge between structural and physical aspects of music and its power to evoke different emotions. The cross-stimulation of the senses in synaesthesia was illustrated in the linking between colour and shapes experienced by some people. This led on to the consideration of clairvoyants such as Geoffrey Hodson who have described a range of subtle forms in the energy field. Active listening to the Haydn 'Emperor' quartet, and Bach's Prelude #4 in C# minor (Book 1, The Well Tempered Clavier) while viewing the associated images was a great way to end a fascinating evening.

In November we held our AGM followed by an update from **Robin Kelly**. After our Annual General Meeting Robin spoke again about his approach to healthcare and some of his impressions from recent conferences he had attended in Canada. He began by referring to two current news items. A pharmaceutical company wants to give a cholesterol lowering drug to everyone from an early age, irrespective of potential side effects. On the other hand, a 13 year old girl in Britain has won her fight against hospital authorities for the right to decline treatment for a fatal heart condition. What is at stake is the recognition of the importance of patients' taking ownership of their health and of the medical practitioners' role to assist them do so. Most of his patients welcome this and it is supported by the developments in epigenetics and therapies such as the Emotional Freedom Technique. Robin aims to simplify procedures such as acupuncture and EFT so that patients can easily apply them by themselves. As well as the usual opportunities to share experience with other practitioners the recent meetings in Canada provided inspirational encounters with people such as quantum physicist Amit Goswami, a proponent of consciousness as the ground of all being. This concept leads naturally to the recognition of our interconnectedness and the constructive spiritual value of compassion and empathy in healing.

Cambridge Group

HAZEL GUEST – 01223 369148

On 10th September Hazel Guest introduced the topic 'The Beliefs and Mentality of a Cult', and on 12 November Steve Minett explained the analogue theory in a short talk entitled 'Meaning, Emotions and the Analogue Brain'. Both talks led to a lively discussion of the issues raised. The next meeting is scheduled for Wednesday 14 January 2009 when Richard Michell will introduce a discussion on 'Veganism'.

We meet 7.40 for 8 p.m. on the second Wednesday of alternate months in Hazel Guest's flat, 44 Beaufort Place, Thompson's Lane, Cambridge CB5 8AB, tel: 01223 369148. The format is an introductory talk for about 15 or 20 minutes, followed by discussion.

London Group

CLAUDIA NIELSEN – 0207 431 1177

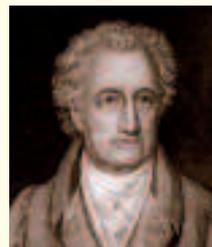
The talks below have been recorded and can be heard or downloaded from 'Summaries of Previous Events' of the **London Group** page of the Network's website. To do so, please go through the Members' Circle portal.

The presentation in July was entitled *Beethoven and the A-Lonely Triumph over Spiritual Suffering* and was given by **Edi Bilimoria**, who is a Consultant Engineer for the transport, petrochemical, construction and oil and gas industries, an international lecturer, a keen musician and pianist and the author of *The Snake and the Rope - Problems in Western Science Resolved by Occult Science*, the book which recently received the SMN book prize for 2007. In explaining the person behind the music which moves the world, Edi



took us through Beethoven's life, personality, health, sufferings in love, religion and philosophy. By understanding his nature, we were moved to appreciate how a man with such tempestuous character, who knew his worth and used it unabashedly, had to learn through suffering, to deal with the tragedy of loss of hearing at the young age of 28, in a profession where hearing is almost everything. He felt suicidal, but recognizing his mission as inspired by a higher force, set his strong character to work for his music, his art.

Edi made an interesting comparison between Napoleon and Beethoven, both born within months of each other, in which he showed how both were revolutionary, loved power, but developed in opposite direction, Napoleon expanding his strong ego, and Beethoven submitting his to what he called the Divine Will. Beethoven was widely read and from his prolific writings we can see that he was deeply influenced by the Vedas, as well as other spiritual scriptures. Edi stressed that we can only understand his greatness through the greater (rather than the lesser), seeing him as an advanced student of the spiritual path. We heard interesting comparisons between Beethoven's philosophy and that of Newton and Blavatsky. Pain and suffering pursued him also in love, his passion aiming always at the unobtainable, and his financial circumstances did not escape either for having been reasonably well off for most of his life, he ended up virtually destitute and died penniless at the age of 56 in 1827. Edi allowed us to look through a chink and see into the inner life of this larger than life master, whose music became the vehicle by which his suffering of the heart and spirit touches our own and move us closer to the divine.



In August, **Philip Franses**, presented on a topic he called 'What is Red in the Science of Goethe?' Philip was formerly a mathematician and computer project initiator and calls himself now a holistic scientist. He researches into the benefits of herbs at Bristol University and teaches at Schumacher College. This evening he offered an understanding of the concepts behind

Goethe's *Theory of Colours*, published in 1810. Philip explained the development of the theory of light in traditional science, understood within a model which describes light in static terms, as packets of particles or waves. Goethean science however is different. The approach is holistic and seeks to include the observer as well as the phenomenon. As an example, we were shown a picture of Notre Dame in Paris at dawn, with part of its façade in the warm, reddish light of the rising sun and were asked to evaluate the mood elicited, considering both the lighter and darker parts of the picture.

A good discussion followed. We were then shown a picture painted in hues of blue which the group saw as calming, peaceful, serene etc, and then another picture painted in shades of red, which we described as passion, fire, rage, hot etc. As Philip pointed out, if colour were nothing but a property of the physics of light, there would be no difference in the way we feel towards those pictures. But colour can and does elicit emotions and is used by artists to this effect, which shows that light has qualities beyond those described in physics. Goethe's science has a holistic methodology which includes the observer as part of the unity of which the object under investigation is a part. In other words as well as analysis, there is synthesis which leads to understanding. So to answer the question of what is red in the science of Goethe, we need to look not only at the qualities of the light itself, but also at how it affects us in the way we apprehend and perceive the colour. Although members can see the pictures used in this talk, unfortunately due to a technical problem, it has not been recorded. Apologies.

September brought us **Dr. David Bell**, a long standing and committed SMN member, who is a minister and the Director of Ministry Development Programme for the Methodist Church of New Zealand. David's talk was entitled *Humanity and Divinity in John's Gospel: an exploration of Ways of Knowing, Being and Healing in the Logos Theology*. The talk was based on the



thoughts of the French mystic Simone Weil who understood Christ to be the Mediator linking the Creator with Creation. David explored the hidden message of this particular gospel, where this perspective is to be found and for this reason, stands apart from the other three (Mark, Luke and Mathew). On the humanity side of the equation we heard about the role of the people who figure

in this gospel, the named and the unnamed ones and who often represent archetypes of humanity, understood as symbolic representations of human development towards divinity. David developed this idea with examples as in John 9 for instance, the man born blind to whom Jesus gives vision, representing our own inner spiritual vision emerging from our spiritual blindness. On the divinity aspect David drew on the introduction of the Gospel – In the beginning was the Word, and the Word was with God, and the Word was God. The Greek word Logos translated as Word, we were told, can equally be translated by the term mediator –the Mediator among us, made Flesh. David went on to point out some interesting literary structures used in the text which covertly parallel mathematical patterns which he explicated using algebra and geometric shapes, to support the theory of the author of this gospel showing Christ as mediator between the divine and the human. Humanity is constantly trying to locate Jesus as God and God is constantly trying to locate him as human. From this follows the ultimate message of the gospel of John, that like Jesus the potential to be mediator is in all of us!

In October the speaker was **Dr. Usama Hassan**, who talked about 'God, Science and the Koran'. Usama is Senior Lecturer in Computing Science at Middlesex University, Planetarium Lecturer at the Royal Observatory, Greenwich and is a certified transmitter of the sacred texts of Islam, the Koran and Hadith. He is an imam at Tawhid Mosque in London. In his talk Usama gave us an overview of how the mystical perspective deals with some fundamental arguments which pervade the discourse in Islam. He acknowledged that his views may be perceived as heretical by some traditionalist Muslims, and also that there are many paradoxes which the rational mind finds difficult to accommodate. He started by looking at the question of who created the Creator, posed by many skeptics. This question arose in Christianity at the time of the Enlightenment but in Islam this is a non-question for God is a given and the point of departure for all understanding and exploration.

God can be apprehended by his 99 names which are also his attributes and it could be said that people who believe in concepts like Justice, Beauty, Truth, etc, believe in God as these are some of his attributes. Everything in the natural world living and non-living are signs and point towards God, who is transcendent and also immanent. Usama also addressed controversial questions between traditional and mystical approaches. As a physicist with a mystical perspective Usama feels quite uncomfortable with some of the Islamic traditionalist views for instance on creationism or the denial of causality. This he sees specifically as responsible in the past for the downfall of Islam's influence on scientific development, which it led for centuries. On the question of consciousness, we heard that, as in other mystical approaches, the whole of the material world is seen as being conscious. The more complex the individual, the more complex its consciousness or cosmic spirit, but even the lowest in the complexity scale - a pebble or a plant - has a degree of consciousness. There is a correspondence between the hierarchy in complexity and in will, i.e, even a pebble has a rudimentary degree of will. During question time we discussed revelation, free will versus determinism, the divine principles of anger and love, what might be not God etc. It was a lively evening, at the end of which we all were felt enriched.

Dr Shanida Nataraja has a PhD in Neurophysiology from University College London and in November she spoke about the *Blissful Brain: Neuroscience and Proof of Power of Meditation*, which is the title of her new book. In her talk, she explained what goes on in the brain when we meditate as well as the physical, mental and psychological effects of meditation. Up until recently, meditation was associated mainly

with spiritual traditions and Shanida showed through research evidence, that meditation is in fact a beneficial activity which has very practical implications for our health and well being, and contributes to our effectiveness in what for most of us is a stressful daily life. We saw slides from a study by Andrew Newberg showing the physical effects of meditation on the brain, particularly changes in the frontal and the parietal lobes, associated with attention and orientation in space and time respectively.

Shanida explained how what is felt during meditation manifests physically in the brain and gave us her view that being 'hard wired' for it, the brain acts as receiver for mystical experiences. She did not however go into the field of neuro-theology, which she felt was not part of her remit. Shifting the activity from left to right hand side, meditation gives access to modes of thinking and perceiving offered by this more creative side of the brain and allows us to use the full potential of both sides of the brain. We then heard about the physical changes in the body mediated by the parasympathetic system, and also about the electrical activity in the brain, with the four types of brain waves (delta, theta, alpha and beta) associated with different levels of consciousness. And finally about the health benefits. In the UK recently, NICE has approved the use of mindfulness based Cognitive Behavioural therapies for management of depression along the lines of MBSR (Mindfulness Based Stress Reduction), developed by Jon Kabat-Zinn in the US based on Buddhist mindfulness meditation. Research has shown this to be effective with cancer and other patients. We also heard that there are moves to introduce meditation in some progressive schools, which is wonderful news. Shanida succeeded in her efforts to show us the evidence and we were left with no doubts about the benefits of meditation in all areas of life.

Manchester Group

CHRISTINA HEATON - christinaheaton@msn.com

Summary of Manchester meeting held Sunday September 14th 2008.

Mandi Solk presented the morning session 'Singing for Joy and Health'. She demonstrated basic singing techniques and explained the health benefits for each. This included the nasal 'n' chant, excellent for the ears, tinnitus and any blockage of the ears and/or sinuses. Singing methods to alleviate migraine, depression and indigestion were also demonstrated. Those attending the meeting responded wholeheartedly to the invitation to practise these techniques. The session ended with the group twice singing *Amazing Grace*, the second rendition including harmonies. It was a warm, sunny day and all windows and doors were open to the wilderness of the Rossendale Valley, whose wildlife were witness to the first known performance of an SMN Manchester group choir. A question and answer session followed. More information about Mandi's work with singing for health can be found at www.fullspectrumhealing.co.uk and she can be contacted at amanda@fullspectrumhealing.co.uk.

The afternoon session was presented by **Joanne Walter** and was titled 'The Scientist, the Therapist and the Consciousness-maker: a quantum physics based model for neurolinguistic communication and consciousness creation'. Joanne described her own path, outlining her background as a molecular scientist at University in Durham and then Oxford, specialising in work with DNA and RNA. She helped develop new techniques to analyse DNA changes in diseases. Becoming interested in how people learn, Joanne retrained to be a therapist and formed an understanding that as we focus our attention, so our consciousness is formed: when focus is altered, consciousness changes. Joanne explained that in NLP it is generally accepted that the conscious mind accounts for around 8% of our computing power while the unconscious mind is the home of emotions and stores automatic responses, using 92% of our computing power. The superconscious mind is sometimes also referred to as the Higher Self.

A substantial body of evidence is emerging that the mind has control over the body. Research into the effectiveness of the placebo effect is one example. We need to be aware that our mind can have control over the body and this ability to

override natural biological mechanisms can have severe health repercussions. One such example (Andrew Newberg MD) cites that 90% of illness arises from our ability to ignore the mechanisms of the stress response in everyday life. The presentation ended with the conclusion that while the speed and volume of the unconscious mind are at present unknown, there is evidence to suggest that belief impacts on outer reality, which in turn impacts on inner reality and vice versa.

A question and answer session followed with some strong views exchanged between the philosophers, the medical community and the quantum physicists. Joanne held that it was perfectly possible for anyone in the group, herself included, to have changed their mind in the future – a pointer to the SMN principle of openness. The particular validity of this viewpoint is that we should be open to changing our minds if new or contrary evidence is presented. Joanne Walter works to effect change using a model that combines quantum physics with consciousness studies. Further information is on her website www.posichoice.com and she can be contacted at jmw@posichoice.com.

Throughout the day Harry the Hound, who has attended each meeting, modelled openness and compassion to all together with a splendid display of rigour during lunch. Harry has accepted the invitation from the Franciscan Community to attend the next meeting, to be held at the Franciscan Friary.



Scottish Group

DAVID LORIMER – 01333 340490

Annie Miller writes: A meeting was held on Thursday 6 November in Morningside, Edinburgh to discuss Graham Dunstan Martin's book, 'Living on Purpose: Meaning, Intention and Value', 2008, Edinburgh: Floris, £20 pbk. Having met on 3 June, when local author, **Graham Dunstan Martin**, introduced his latest book to the Scottish SMN group, several of us felt that we would like to resume the ensuing discussion having read the book. Seven of us met Graham again on 6 November. The aim of the book is to review the evidence for the existence of a spiritual (non-material) dimension to life, the continuation of life after death and for the existence of God(s), and thence to the question of a Universal Purpose. The book is comprehensive. Graham examines the view of materialist scientists, the contradictory claims of many religions and the roots of good and evil, before reviewing the evidence for out-of-body experiences, near death experiences, survival and reincarnation. These were questions dear to the hearts of those present. A wide-ranging, well-informed discussion took place covering inputs from philosophy, theology, comparative religion, mysticism, parapsychology and psychotherapy, amongst others. A most enjoyable and stimulating evening was had by all.

South-West Group

Review of meeting of SW branch of SMN on 29th November at Bogan House, Totnes. The theme of this meeting was: 'A Paradigm Shift in Approaches to Medicine, Mind & Self-Healing,' Chaired by Jean Hardy

Wendy Stayte writes: Firstly, **Dr Ruth Sewell**, (a psychotherapist, author, teacher and mentor, who has specialised in cancer and palliative care for over 20 years), talked about **Psycho-Neuro-Immunology**, or PNI, which is assisting practitioners working in health and healing to reach a full understanding of the vital importance of the subtle pathways of communication that take place between the mind, emotions, the heart, the nervous system, and the body's natural defence (the immune system). Ruth used the example of chronic and unremitting stress to highlight how the various systems of our body are affected in this situation, the influence of mind, [one person's stress is another's delight], and how nervous, hormonal and immune systems affect each other.

She also gave us a colourful personal demonstration of how the stress of not finding a parking place near Bogan House had affected her mind and body, which warmed her to us! She gave us encouraging results of the effects of distance healing and prayer, and reminded us that curing the illness is different from healing the person. Healing, she said, involves the integration of all levels of functioning of mind, body, heart and soul, in the healer as in the healed.

Ruth has held senior posts at Macmillan, Marie Curie Care, as well as playing an instrumental role as head of education at the universally renowned Penny Bohn Cancer Care, which was formally known as Bristol Cancer Help Centre. She is also a visiting lecturer at Peninsula Medical School.

The second speaker was Plymouth GP **Rory McGill**, presenting his talk: '**Mind over Medicine.**' Rory has been a practising GP within the NHS in Plymouth for over 20 years, and has just recently opted out for one day a week, so that he can focus on a more holistic and integrated form of medicine and healthcare with patients. He described himself as a pragmatist, on the look-out for ways of helping his patients rediscover wellness, and preferably helping themselves, without recourse to doctors. His sense of humour is probably one of his greatest assets in restoring health!

Coming from a position of regarding most illness as psychosomatic, he focussed on a few particular common syndromes like irritable bowel syndrome, chronic back pain and others, to tell us of some of the research on alternative ways of understanding and treating these conditions. He also shared his thoughts, and experiences of prayer, meditation, the placebo effect, bio-feedback and self-hypnosis, as ways in which people can help themselves. He advises many patients to read John Sarno's book on these themes; and gives lectures to groups of his patients on self-care and the effect of mind on body. I thought the Plymouth folk of his practice are lucky to have him!

Yorkshire Group

MAX PAYNE 01142 304194,

MIKE BROWN 01423 879038

YORKSHIRE SMN GROUP 11 September 2008

Max Payne writes: The meeting was held at 16 Burnt Stones Grove, Sheffield. **Rev. David Bell** (New Zealand SMN) gave a talk on **Humanity & Divinity in St. John's Gospel**. A full open scientific inquiry should not push subjectivity to one side. Scientific objectivity is the product of the subjectivity of scientists, and objectivity and subjectivity are interconnected in profound ways not as yet properly understood. St. John's Gospel provides a profound exploration of the dimension of subjectivity by using thought forms taken from Neo-Platonic mathematical philosophy. In it Jesus was described as the 'mediator'. This, in Greek, is also the term used for the 'Golden Mean', which is the term of proportion essential in Greek architecture and mathematics. Therefore Jesus exemplifies the right relationship between the human and the Divine. The later church interpreted this relationship as unique, but it is quite clear that the writer of the Gospel considered the relationship to be universal. There is therefore an open dimension of the subjective as vast in its direction as the dimensions of space and time explored by the cosmologists.

Margaret Hilderley spoke on **Autogenic Therapy & Meditation**. Autogenic therapy (AT) is a type of meditation used for reducing stress. She used this in a pilot study on a group of early stage cancer patients and observed the effect on stress-related behaviour and immune system response. This was a randomised trial with 31 early stage breast cancer women who had received lumpectomy and radiotherapy. Group 1 merely received a home visit, while Group 2 received a home visit and 2 months autogenic training. At the beginning of the trial all had their Hospital Anxiety and Depression scale (HADS), and their T and B cell (immune cell) markers measured. At the end of the trial the AT had a statistically significant improvement in their HADS scale, and those who achieved a meditative state had a significant increase in their immune response. The research suggests that AT is a powerful self-help therapy and a fuller large scale project is needed to pursue this further.

Jim Lyons gave an account of the work of the Selby Energy Forum. He described new technology which can make Yorkshire

coal mines profitable, and research into biomass generators using cellulose. Oxygenated hydrogen could power existing designs of car, and yield 100 miles per gallon of petrol. In his opinion nuclear power from fission was a limited option, and power from fusion was still 30 years away - had been so for years! It was quantum zero point energy that offered the real breakthrough, and there was already apparatus at the University of York that was producing more energy than was put into it.

MEMBERS' ARTICLES AND ARTICLES OF INTEREST

All the articles listed below are available electronically on the members' side of the website or online if referenced.

SCIENCE/PHILOSOPHY OF SCIENCE

Investigating Paranormal Phenomena: functional brain imaging of telepathy - Ganesan Venkatasubramanian, Peruvumba N Jayakumar, Hongasandra R Nagendra1, Dindagur Nagaraja, Deeptha R1, Bangalore N Gangadhar

National Institute of Mental Health and Neurosciences, Bangalore, Swami Vivekananda Yoga Anusandhana Samsthana, Vivekananda Yoga Research Foundation, Bangalore, India. (6 pp.)

The aim of this study was to elucidate the neural basis of telepathy by examining an individual with this special ability. The mentalist demonstrated significant activation of the right parahippocampal gyrus after successful performance of a telepathic task. The comparison subject, who did not show any telepathic ability, demonstrated significant activation of the left inferior frontal gyrus.

How the Brain Decides What to Believe - Peter Tarr (3 pp.)

Having a sense of what we know — and don't know — is a universal human experience, and has often been assumed to be the hallmark of self-consciousness. But new research by neuroscientists at Cold Spring Harbor Laboratory (CSHL) suggests that the estimation of confidence that underlies decisions may be the product of a very basic kind of information processing in the brain, shared widely across species and not strictly confined to those, like us, that are self-aware.

Wallace: The Evolution of an Unforgotten Naturalist – Peter Raby (13 pp.). His talk from our recent conference on Alfred Russel Wallace.

MEDICINE-HEALTH

Dr. Gerson's Suppressed 1946 Congressional Testimony – compilation with web links by Chris Gupta (6 pp.)

Ki-Energy in the Invisible Body: Its Detection and Meaning, presented at the Conference, "Body and Beyond," August 22-24, 2008 - Shigenori Nagatomo (20 pp.)

The Mother as the Observer: Poets, Actors, Physics and Holistic Recovery from Schizophrenia - Ros Forbes (15 pp.)

Benefits and Risks of Homoeopathy – Ben Goldacre (3 pp., from *The Lancet* 2007; 370:1672-1673)

New Evidence for Homoeopathy – Press Release from British Journal of Homoeopathy, 2008 (2 pp.).

PHILOSOPHY-RELIGION

Report/Transcript of St Alfege Symposium on Science and Religion, chaired by Chris Todhunter (24 pp.). A detailed account of a fascinating day asking the question 'What is Life?' from the angles of complexity theory, religion and the arts.

Intelligent Design Without the Bible - Deepak Chopra (3 pp., from *The Huffington Post*). To say that Nature displays intelligence doesn't make you a Christian fundamentalist. It's high time to rescue 'intelligent design' from the politics of religion. There are too many riddles not yet answered by either biology or the Bible, and by asking them honestly, without foregone conclusions, science could take a huge leap forward.

The Evolution of Consciousness as a Planetary Imperative: an integration of integral views, Jennifer Gidley, Integral Review, 5, 2007 http://integral-review.org/current_issue/documents/Gidley,

Towards A.N.E.W.E.R.A. - Alternative Non Entropic Worldview Epistemological Resolution Analysis by through and from Klein-Bottle Wholeness - Dr. Melanie Claire Purcell. <http://www.towardsanewera.net/a%20new%20era%20contents.htm>

The Kleinbottle is revealed in the correspondence exchanged between Steven Rosen and David Bohm as the most unifying topology that realises WHOLENESS, FORMATIVE CAUSATION, and an ONTOLOGICAL bridge for comprehending CONSCIOUSNESS through an epistemology that invokes PANENTHEISM as the most universal spiritual construct.

In the Image of God - - You are the Divinity you Seek - William Meader (5 pp.)

Some Reflections on the Dawn of Time - Johan Lem (4 pp.)

CONSCIOUSNESS STUDIES

Emergentism and the Evolution of Consciousness, John Clarke (10 pp.) – based on a talk given at the AGM in Switzerland.

The Signs of the Times and the Time of the Heart - Roger J. Woolger (15 pp.)

Some Personal Comments on the SMN Approach to Paranormal Phenomena - John F. Caddy PhD, (5 pp.) jfcaddy@yahoo.co.uk

Additional Report on The Body and Beyond – John Kapp (5 pp.)

Main Features of Objective Thinking Strategy, Keith Robins (4 pp.)

Instead of being concerned with how the firing of neurons translate into subjective experience we should be concerned with training the mind to think objectively. The fault lies in the way the mind is trained or untrained i.e. seeking to interpret when they should be self-centred. The brain has no operating instructions and humans are naturally curious, hence they seek the meaning of the outside world and create their own truth model to represent this outside world, based on preconceptions or 'truth' rules formulated from knowledge gained through the senses i.e. experience.

GENERAL

Thanksgiving Letter – A Much Needed Injection of Hope – Caroline Myss (7 pp.), see www.carolinemyss.com

A remarkable meditation on the deep transformation of our times. Caroline says: 'Let's "reason like a mystic" as we examine the chaos in the world around us. Instead of looking through the lens of ordinary reason and thought, let us look through the lens of mystical law, those laws which govern the collective field of energy and the collective soul of humanity.'

From Literary Criticism to Criticism of Science, World View, Way of Thinking - Erland Lagerroth, University of Lund, Sweden (11 pp.) - This is my home page, a personal account of a development that might be of interest to members of SMN. It is a condensed version; the full story can be read on www.lagerroth.com

Action Plan for Shifting Paradigm and Saving Humanity from Extinction, Jens Jerndal, (9 pp.), www.jerndal.net Will Humanity survive even the next decade, the way things are going? Argues that all the urgent problems we are facing are man-made, so we do have a choice, and we can stop this chute into oblivion or hell, if we all act together, fast, intelligently and coherently.

Let's Fix the Banking System - instead of throwing more money at it - John Tomlinson (11 pp.). Based on a book written 15 years ago,

John advances a radical proposal to restructure the banking system and control the money supply. See www.honest-money.com

Can we fix the global financial system? Yes, we can, John Bunzl (5 pp.) – see www.simpol.org – advocates a solution based on simultaneous policy change.

The New Trough –Naomi Klein (7 pp.)

The Wall Street bailout looks a lot like Iraq — a “free-fraud zone” where private contractors cash in on the mess they helped create.

Solastalgia: a New Psychoterratic Illness – Vera Gottlieb (7 pp.) ‘Solastalgia’ describes the pain or sickness caused by the loss of, or inability to derive, solace connected to the present state of one’s home environment. See www.healthearth.blogspot.com

Obituary for Tom Welch. [Lt. Col. T.S.M. Welch] (2 pp.). A short piece which everyone who knew Tom will want to read.

Online papers by Anthony Judge:

Being What You Want: problematic kataphatic identity vs. strategic options of apophatic identity?

<http://www.laetusinpraesens.org/docs00s/apophat.php>

Credibility Crunch engendered by Hope-Mongering “Credit Crunch” as Symptom of a Dangerous Mindset

<http://www.laetusinpraesens.org/musings/hopemong.php>

Happiness and Unhappiness through Naysign and Nescience - comprehending the essence of sustainability?

<http://www.laetusinpraesens.org/musings/nart.php>

Climate Change and the Elephant in the Living Room in Quest of an Endangered Species

<http://www.laetusinpraesens.org/musings/eleph.php>

Climate of Change Misrepresented as Climate Change: insights from metaphorical confusion

<http://www.laetusinpraesens.org/docs00s/climrep.php>

Climate Change as a Metaphor of Social Change: systemic implications of emissions, ozone, sunlight, greenhouse and overheating

<http://www.laetusinpraesens.org/docs00s/emission.php>

NEWS AND NOTICES

2008 Faith in Human Rights Statement signed by high representatives of world religions

At a ceremonial gathering in the Peace Palace in The Hague (The Netherlands) on 10 December 2008, the 60th anniversary of the Universal Declaration of Human Rights, the 2008 Faith in Human Rights Statement has been introduced and signed. In the presence of Her Royal Majesty Queen Beatrix religious representatives from all over the world signed the Statement. In the Statement they declare to support the Universal Declaration of Human Rights and commit themselves to promote human rights and fundamental freedoms both within and outside their faith community. The 2008 Faith in Human Rights Statement can be found at www.faithinhumanrights.org in English, Arabic and Dutch. More translations are to follow. The number of endorsements is rapidly growing.

2009 Science and Religion Forum Conference - Advance Notice

Evolving Darwinism - From Natural Theology to a Theology of Nature

Wesley House, Cambridge

Tuesday 8th - Thursday 10th September 2009

Speakers:

Professor Sam Berry:	Biology after Darwin
Professor David Fergusson:	Natural Theology after Darwin
Professor John Brooke:	Christian Darwinians
Dr Denis Alexander:	A Critique of Intelligent Design
Drs Chris Southgate and Andrew Robinson:	From Origin of Life to Incarnation: Towards a New Theology of Evolution

See www.srforum.org

The International Journal of Transpersonal Studies,

The 2008 issue of the *International Journal of Transpersonal Studies* is available at no charge at www.transpersonalstudies.org. The issue begins with topics that range from embodied spirituality, to the nature of shamanic journey imagery, to a philosophy that offers a unified view of mind, matter, and consciousness. Articles include:

What Does it Mean to Live a Fully Embodied Spiritual Life?
Jorge N. Ferrer

Brief History of Transpersonal Psychology
Stanislav Grof

The Role of Spirituality in Mental Health Interventions: A Developmental Perspective

Liora Birnbaum, Aiton Birnbaum, and Ofra Mayselless

Journal of Non-Locality and Remote Mental Interaction

Bob Charman writes: A colleague has just referred me to the Journal of Non-Locality and Remote Mental Interaction <http://www.emergentmind.org/journal.htm> which is new to me. I am passing this reference on to you as all the articles in the eight issues to date can be downloaded. They take psi as read and much of the discussion centres around quantum biophysics and the like that may well interest many physics-minded SMN members.

Spirituality, Health and Human Flourishing: Meaning? Measurement? Implications?

The First Annual Meeting of the Society for Spirituality, Theology & Health brought together transdisciplinary scholars and interested physicians, clergy, chaplains, nurses and lay persons from the United States and other parts of the world to present and discuss the latest research in spirituality, theology, and health. Proceedings from the 2008 Annual Meeting have been posted. See www.dukespiritualityandhealth.org.

Defining Wisdom

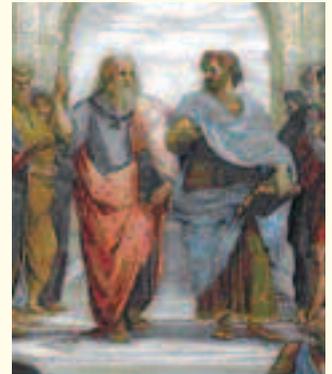
The astonishing scientific and technological advances of recent decades have placed more information than ever before at our fingertips. Yet, as a range of social critics have observed, we seem to be no more thoughtful or prudent than previous generations. Knowledge has expanded exponentially, but wisdom has failed to keep pace.

This paradox lies at the heart of a new research project called “Defining Wisdom.” Based at the University of Chicago, the four-year initiative, supported by a grant of \$3 million from the Templeton Foundation, will examine the idea of wisdom from a variety of disciplinary perspectives, with the aim of better understanding the nature of wisdom, its benefits and applications, and how to cultivate it. See www.wisdomresearch.org

To sign up for Templeton reports, email communications@templeton.org

Policy Foresight and Global Catastrophic Risks

On 21 July 2008, the Policy Foresight Programme, in conjunction with the Future of Humanity Institute, hosted a day-long workshop on “Policy Foresight and Global Catastrophic Risks” at the James Martin 21st Century School at the University of Oxford. Sir Crispin Tickell chaired the day’s events, and began by noting that the purpose of the day was to bring together academics and policymakers to promote discussion on the actions that governments, and in particular the British government, could take now to create a more resilient society in the face of catastrophes. The report can be downloaded from www.jamesmartininstitute.net



© Scala / Art Resource, NY

Raphael's *School of Athens*, detail of central section with Plato and Aristotle.

book reviews

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science-philosophy of science

The Neuroscience of Empathy

David Lorimer

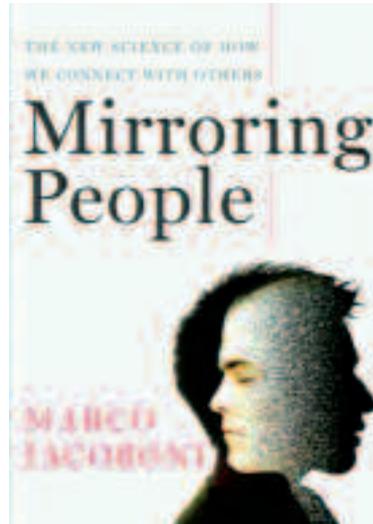
MIRRORING PEOPLE

Marco Iacoboni

FSG, New York, 2008, 208 pp., \$25,
h/b – ISBN 978 0 374 21017 5

This popular exposition of the science of mirror neurons will reframe your ideas on how we relate to each other at a bodily and social level. Beginning with research into macaque monkeys gradually extended to human beings, the author explains the ways in which our brains respond to actions performed by others, and that, so far as the brain is concerned, there is no difference between perception and action. It turns out that we understand the mental states of others by simulating them in our brains by way of mirror neurons. Indeed, we learn by imitating, and this from a very young age, actually developing the capacity of mirror neurons by means of this process. Hence it can readily be appreciated that failure to develop in early childhood can have severe consequences at a later stage. Mirror neurons not only code intentions, but also enable us to understand the intentions of others. Iacoboni quotes Merleau-Ponty (there is a phenomenological-existential background here) that 'it is as if the other's intention inhabits my body, and mine his.' Interestingly, the major language area of the brain is also key for imitation and contains mirror neurons.

The next step discusses the relationship between mimicry and recognition, which is in turn linked to empathy. Mirroring expressions and gestures is a very important component of establishing social



relationships. Merleau-Ponty again: 'I live in the facial expression of the other, as I feel him living in mine.' This puts the emphasis on reciprocity, correspondingly playing down social autonomy and even naive formulations of free will. At a physiological level, it seems that mirror neurons communicate through the insula to the limbic system, which evokes the feeling. An arresting formulation of the consequences of this view is that 'the brain treats pain as an experience we share with others.' In other words, we are intersubjectively wired for empathy and 'co-constituted'. This is especially evident in early stages of mother-child relationships, discussed in the next chapter. As indicated above, it seems that mirror neurons are formed by interaction between self and other.

An interesting chapter on autism reports deficiencies in the capacity for social and emotional forms of imitation arising from mirror neuron dysfunction with delayed activation. This suggests forms of therapy to help activate mirror neurons, which seem to be having some success. A highly significant social issue concerns imitative violence, also mediated by mirror neurons. Research results indicate that

media violence does increase imitative violence, a finding that should not be lost on policymakers however unpopular with the media itself. Mirror neurons make it hard for people to overcome addictions like smoking, since they are activated when ex-smokers see another person smoking. So they tend to reinforce social patterns within groups (birds of a feather...). They can also be a marker of identification with a brand or even a candidate for political office.

A further line of research engages brain imaging with questions of a political nature. Those with interest and experience have laid down default pathways and can easily produce well-rehearsed answers to interview questions. These come from memory areas, while the same questions put to novices engage cognitive areas and shut down their default networks. Another aspect of the default state which will perhaps now come as no surprise is that self and other are interdependent. All this adds up to a picture of greater interconnectedness than our individualistic outlook suggests, which may provide some neurobiological reinforcement of the vastly increased level of engagement and co-operation that we are going to need if we are to address globally interconnected issues. Nor is this insight lost on the author. However, as he points out, the same neurobiological mechanisms that mediate empathy can also mediate violence. I would not go as far as he does in claiming that 'our social codes are largely dictated by our biology', but there is no doubt that neurobiology is an important underpinning and one that we can use to advantage. It is encouraging to know that we have evolved to connect deeply to other human beings but we have some way to go in extending the circle of compassion and breaking out of a spiral of violence.

**DO YOU HAVE ANY PHOTOGRAPHS OF A NETWORK GROUP,
WORKSHOP OR CONFERENCE?**

If so, please send them to Olly Robinson at olly@scimednet.org for publication in the Network Review

The Art of Knowing: beyond the realm of science

Martin Lockley

PROUST WAS A NEUROSCIENTIST

Jonah Lehrer

Houghton Mifflin, 2007, 242 pp., US\$ 24, h/b, ISBN 13 – 978 0 618 62010 4

What do Whitman, Eliot, Escoffier, Proust, Cézanne, Stravinsky, Stein, Woolf and other artists have in common? The answer, according to Jonah Lehrer, is that they all discovered 'essential truths about the mind' that science is only now bringing into focus. An artist's way of knowing our complex psychological dynamics involves a qualitative appreciation of human nature which extracts shades of meaning and understanding, tragedy and comedy, that are unobtainable by the analytical and quantitative methods of science. Likewise the richness of such human experience is best conveyed creatively in poetry, prose, art, drama, music and even loving culinary creations, not with charts, graphs and numbers.

In his eight biographical chapters Lehrer begins with Whitman and *The Substance of Feeling*. Influenced by Emersonian mysticism, Whitman celebrated his transcendental potential - some say 'cosmic consciousness - joyously. He felt his intangible soul deeply rooted in the vibrant body electric: 'I am the poet of the body, and I am the poet of the soul.' As Lehrer puts it 'the mind stalks the flesh...[generating].. our metaphysical feelings from the physical body' Moreover, these feelings are 'an

essential element of rational thought.' 'We are the poem...that emerges from the unity of the body and the mind.'

In Chapter 2 Lehrer explores George Eliot and *The Biology of Freedom* (a topic treated scientifically by SMN member Mae Wan Ho). In the age of Auguste Comte's positivism, contemporaries like Herbert Spencer, sought, like some modern scientists, to formulate a theory of everything (Laplace's 'final laws of the world'). Eliot fell in love with Spencer, but was rejected. She later fell for George Lewes who wrote *The problems of the Mind*, holding that the brain, like love, would always be a complex mystery. Likewise, Eliot rejected positivism's distillation of the universe 'into a neat set of causes' and doubted the Darwinian view that we are passive prisoners of our environment. As modern genetics and Chaos Theory show, Eliot was right. The world is messy. Although we have the freedom to choose - to experience - we can never to finally 'define human nature.'

Chapter 3, on *The Essence of Taste*, places Auguste Escoffier, author of an encyclopedic 1903 cookbook among fellow artists for 'inventing' stock - synonymous with 'unami' (the Japanese word for delicious) - the taste of L-glutamate ($C_5H_9NO_4$) which is actually 'released from life forms by proteolysis' (death, rot and the cooking process). We now know that although the tongue has distinct glutamate receptors 'what we experience is not what we sense... sensations are interpreted by the subjective brain,' and it is this individuality of experience that 'science will never be able to solve.'

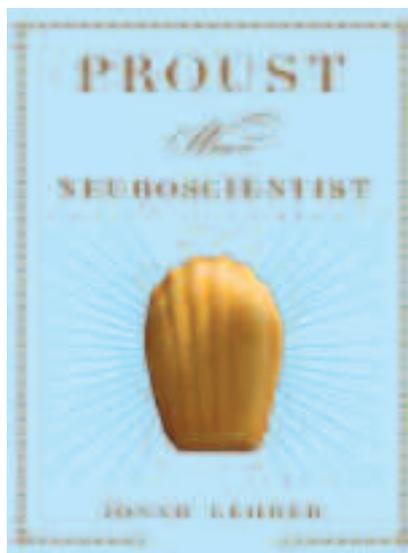
Cooking sets the stage for Chapter 4 on Marcel Proust and *The Method of Memory*. A neuroscience article (*Testing the Proustian Hypothesis*) showed 'that our sense of smell and taste are uniquely sentimental' (connected to the Hippocampus and so to long term memory). But Proust held that our memories are faulty and science has proved him right. Freud, for example, understood that individuals remembering abuse actually created subjective, genuinely-believed memories. So 'our recollections are... designed by the brain to always feel true, regardless of whether or not they actually occurred.' Memories are only as real as the last time you remembered them: they change 'to fit what we know now.' Modern science shows that molecules of memory (CPEB and Prions) are malleable, subjective fibers. As

Proust knew, 'the past is never the past.' It can not be described objectively. We have to misremember something to remember it. We see ourselves in a 'mercurial mirror.'

Paul Cézanne, the subject of Chapter 5 - *The Process of Sight* - said 'The eye is not enough... One needs to think as well.' As Lehrer also explains, 'light is not enough.' The eye does not capture a 2D photograph (literally a 'light drawing') on the retina and see it with the visual cortex. The brain 'sees' via two paths: one fast, creating blurry abstract pictures in the pre-frontal cortex, one slow, processing or 'interpreting' the abstractions into meaningful form. Thus, one of Oliver Sacks' patients with a damaged pathway, could see only abstract Cézanne-like images, and had to smell a rose in order to see more than a 'convoluted red form with a linear green attachment.' In short, 'the mind is not a mirror.' As Kant noted, 'The imagination is a necessary ingredient of perception itself.' The same neurons fire when we see or simply imagine something. Cézanne understood that without self conscious participation our eyeballs, merely see lonely impersonal points of light.

Chapter 6 - *The Source of Music* - deals with Stravinsky and the resonance between our body-mind and the music we hear. 'Hair cells mirror the escalating notes' ... 'imagining what notes will come next.' Thus, the dissonance of 'Stravinsky's music is all [deliberate] violation' - a 'stampede' and enough to make us unsettled, even angry, releasing dopamine in an 'imbalanced' rather than a soothing way. Thus, Stravinsky's music challenges our comfortable expectations, even biochemically, teaching us how we hear and participate in hearing. Music is 'made by the mind ...[which] ...can learn to listen to almost anything.' Stravinsky 'is the sound of art changing the brain.'

Chapter 7 deals with Gertrude Stein and *The Structure of Language*. Stein worked in William James' psychology lab, holding him in high regard. She explored automatic writing which she later evolved into her Dadaistic avant-garde style. Her deliberate attempts to write meaningless nonsense were still grammatical. In concluding that 'there is no good nonsense without sense' she anticipated Chomsky who, like James, rejected the simplistic tenets of the 'new' quantitative psychology which espoused behavior-



ism and held that grammar was a type of combinatorial statistics (finite state model). Far from it! Language has deep structure: 'from English to Cantonese... there is only one language... an instinct as deep as it is universal.' Stein confessed 'I made innumerable attempts to make words write without sense and found it impossible.' Meaning runs deep in the human mind. As Emerson said 'words are the finite organs of the infinite mind.'

Lehrer's final protagonist (Chapter 8) is Virginia Woolf whose art explored *The Emergent Self*. Suffering from 'fear of her own mind, exquisitely sensitive to its fevered vibrations' she introspected 'my own psychology interests me' and lamented that modern writers like H. G. Wells looked only at exteriors not at the 'mind's interiors' or 'at human nature.' Our minds are fragile, flowing streams of consciousness 'at the whim of feelings we don't understand and sensations we can't control.... Like the Hebridean weather, change is the only constant.' [A very Buddhist philosophy]. In Woolf's fiction the self arises...a vision stolen from the flux.' But 'how does a process become us?' Is 'the self...simply our work of art' what each of us creates from a 'world made of fragments.' Modern neuroscience seeks to find 'the loom of cells that create the self'...the Neural Correlate of Consciousness (NCC). But this is impossible. The self can never be seen outside the self - without a self. Science must always 'surrender its claims of absolute knowledge.' It can break us apart (analysis) but it is art that puts us together (synthesis).

In his first acclaimed book Lehrer has succeeded admirably in bridging C. P. Snow's two cultures with extraordinary insight. But, he warns, the hoped for integral third culture still has 'serious limitations' as science-magisteria manifestos like E. O. Wilson's *Consilience* demonstrate. As the scientist/artist Vladimir Nobokov remarked 'the deeper one's science the greater the sense of mystery' We may 'never know how the water of our cells turns into the wine of our consciousness.'

Hemispheric Imbalance

Steve Taylor

LEFT IN THE DARK: THE BIOLOGICAL ORIGINS OF THE FALL FROM GRACE

Tony Wright and Graham Gynn

(2nd Edition), Kaleidos Press, 2008, 204 pp., p/b - ISBN-10: 0 955 67840 4

Why do human beings have an insatiable need for conflict and war? Why does it seem to be natural for us to live in a state of discontent? These questions were at the heart of my own book *The Fall*, and are also the basis of this radical book, although with very different conclusions. Whereas I suggest that the 'fall' - which I interpret as an intensification of ego-consciousness - began around 6,000 years ago, Tony Wright and Graham Gynn go back much further.

As they see it, the myths of a 'Golden Age' which are common to many of the world's cultures - for example, the Chinese Age of Perfect Virtue, or the Genesis myth - are a folk memory of human beings' early forest-dwelling past. The 'fall' occurred around 200,000 years ago, when we left the forest and switched from a fruit-based diet to one of leaves, fruits and tubers, insects and meat. More damage occurred much later, with the development of agriculture, when grains and cereals began to dominate people's diet, and food began to be prepared and cooked rather than mainly eaten raw.

Wright and Gynn explain this in terms of split-brain psychology. While we were forest dwellers, the brain had worked as a single system, but the change in diet led to a specialisation in brain function, and the division into two separate - and largely autonomous - hemispheres. The left and right brains are usually seen as having different functions, with the right side linked to creativity, intuition and even psychic abilities. The left brain is traditionally seen as the 'scientific' side, a rational enemy which stops the 'artistic' right side expressing itself. But Wright and Gynn take this theory to a radical extreme: they suggest that

the left brain was actually damaged 200,000 years ago, and has been malfunctioning ever since. They suggest that rather than there being two sides of the brain with different functions, the left side of the brain is actually 'a degenerate equivalent of a right hemisphere.' The right hemisphere 'has basically everything the left has and had,' and could conceivably function independently (p.134).

This theory has some similarities with Julian Jaynes' well known book *The Origins of Consciousness in the Breakdown of the Bicameral Mind*, although Jaynes believed this change occurred much more recently. In fact, the authors state that the shift which Jaynes identified was the final stage of a process which had been underway for a much longer period. Presumably they would interpret what I see as the 'fall' in the same way - and indeed, as I point out in my book, the dominance of the left brain is equivalent to an intensification of the ego, since the ego is a left brain function.

According to Wright and Gynn, then, human beings have been living in a 'brain damaged' state for the past 200,000 years. The dominant right brain cuts us off from meaning, imprisons in a one-dimensional universe, in a world of symbols rather than reality itself. And it also, as they put it, 'keeps the outstanding abilities of the right brain in check' (p.134). The authors put forward an impressive case for these amazing right-brain abilities, such as people whose left brains have been damaged, or even removed altogether in operations. In most cases, these people have gained special talents - for example, a nine year old whose left brain was partly destroyed by a bullet, who switched from an ordinary boy to a genius mechanic, or patients who developed amazing drawing skills after parts of their left brain were destroyed by dementia. They add to this the amazing powers of savants such as Stephen Wiltshire, who is able to produce completely accurate and amazingly detailed aerial drawings of large cities after a short helicopter ride over them. The crucial thing about savants, they

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suggest, is that 'they often have structural and functional damage to their left hemispheres' (p.19).

If the left brain is the source of all our problems, what can we do to weaken its hold? Is it possible for us to return to the right, so to speak? The authors suggest that we can attain a 'restoration of consciousness' through reducing sleep, switching back to a heavily fruit-based diet, meditation and technologies such as Transcranial Magnetic Stimulation. They also tentatively suggest using drugs such as DMT to help re-activate the right brain. And to Tony Wright's credit, he has attempted to follow these guidelines himself. He practises sleep deprivation as a way of diminishing left brain dominance, and is thought to hold the world record for staying awake (11 days and nights, although the Guinness Book of Records no longer keeps account, due to the health risks.) For the past ten years he has eaten only raw food, mostly fruit. Tony writes that he has had powerful mystical experiences as a result of these experiments, but it's a shame that he doesn't describe their cumulative effects in more detail.

While I largely agree with the authors, I can't help thinking that they are a little too hard on the left-brain. If it really is so damaged and dysfunctional, it's difficult to see how it could have survived for so long. Surely it must have had some evolutionary benefit, and conferred some advantage in terms of survival. There are abilities specific to the left brain – such as abstract and symbolic thought and the ability to conceive of future and the past – which must have been advantageous, especially during periods of environmental hardship. And indeed, evidence suggests that absence of the left-brain has a severely impairing effect. One example is the case of the scientist Jill Bolte Taylor, who had a stroke which paralysed the left side of her brain. She experienced a euphoric sense of well-being and timelessness – a classic mystical experience – but was unable to function, losing the ability to read, write or talk (as described in her recent book *A Stroke of Insight*.) Surely we don't need to eliminate the right brain entirely, but just to reduce its dominance. In *The Fall*, I make the same point about the ego: the problem is not the ego in itself, but that the ego has become too intensified and too dominant, monopolising our attention and our

psychic energy. But to destroy the ego entirely would lead to psychosis. We need to tame and quieten the ego, at the same time retaining its organisational and regulating abilities.

Nevertheless, this is a very thought-provoking and stimulating book, with a theory so startling that you are forced to re-evaluate long held assumptions. The authors make their case carefully and plausibly, with a great deal of supporting evidence. (And indeed, their theory has begun to attract support from mainstream academics, as well as alternative figures such as Dennis McKenna and Richard Heinberg.) It's refreshing to read such an audacious and ambitious book, with so much food for thought. Just make sure you eat it raw, with lots of fruit.

Steve Taylor is the author of *The Fall: the Insanity of the Ego in Human History and Making Time*.

His website is www.stevenmtaylor.com.

Meditation and the Brain

David Fontana

THE BLISSFUL BRAIN: NEUROSCIENCE AND PROOF OF THE POWER OF MEDITATION

Shanida Nataraja (SMN)

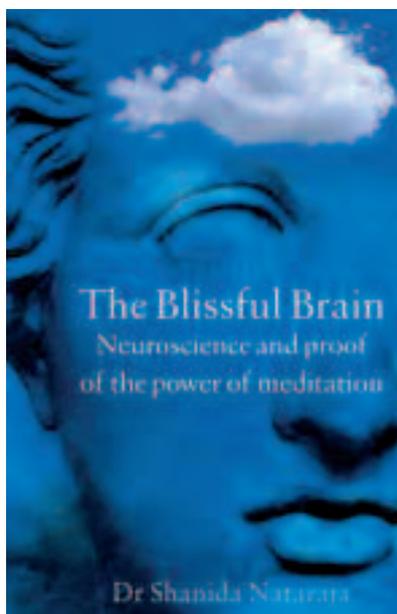
Gaia/Octopus, 2008, 238 pp., £7.99, p/b – ISBN 078 1 85675 291 6

Regular meditators are aware of the benefits – mental and physical as well as spiritual – that arise from the practice. If they were not, it is unlikely they would persist in sitting

motionless for half an hour or more every day focusing the attention on a single stimulus such as the breathing. Meditators testify that in stilling much of the distracting mental chatter that typically dominates the mind they open themselves to subtle spiritual realities that otherwise go unrecognised, and experience levels of tranquillity that carry over into daily life. More recently, evidence of the benefits of meditation in reducing stress-related disorders such as depression and elevated blood pressure, is also accumulating. But in a scientific age reluctant to acknowledge the existence of anything that cannot be measured and quantified, there is an increasing desire to establish whether or not these benefits are accompanied by changes within the brain. We know of course that meditators register alpha brain rhythms during meditating and in some instances even theta and (very rarely) delta rhythms, but brain scientists are eager to know if there are any more fundamental effects, and modern brain imaging techniques currently provide them with the tools for searching for them.

I suspect that part of the motive behind this search is to establish if the benefits of meditation can be reproduced in other, speedier, ways. Why spend precious time sitting on a cushion watching the breath if the same results can be achieved by electrical or chemical means? However, few meditators – aware as they are that benefits associated with meditation such as enhanced self-discipline, self-insight, and mystical experience arise from the meditative journey itself – would have much sympathy with this belief in the possibilities of a shortcut. Like so much else of value in life, the benefits of meditation may not be susceptible to brain tweaking. However, that said, there is no denying that the more we discover about the neuro-physiological changes that accompany meditation, the more likely we are to convince the sceptic of its value.

The form of meditation currently most popular with laboratory-based researchers – perhaps because it is independent of any spiritual or esoteric tradition – is MBSR (Mindfulness Based Stress Reduction), defined by its chief proponent Jon Kabat-Zinn back in 1979 as an 'awareness that arises through paying attention on purpose, in the present moment and non-



judgementally, to the unfolding of the experience moment by moment' (we may wonder how it is possible to pay attention in any way other than in the present moment, but let that pass) and it is primarily from laboratory research with MBSR that Dr. Shanida Nataraja draws her data. Within the confines imposed by this perspective, she takes us through a brief but comprehensive survey of brain function, then proceeds to a summary of this research and its association with so-called mystical states, reaching the conclusion (with earlier researchers Maxwell Cade and Nona Coxhead) that as meditation approaches more closely to these states it goes through five deepening levels of consciousness (as measured by the spectrum of brain waves), the most profound being a state of lucid awareness in which the incidence of alpha and theta rhythms, while remaining at peak incidence, is supplemented by the reappearance of the beta rhythms associated with non-meditative cognitive functioning and absent from the previous levels. This somewhat paradoxical finding suggests that the brain at this fifth level appears capable of simultaneously maintaining both the continuous inner self-awareness present in deep meditation and the continuous outer awareness present in daily life. Furthermore, at this level the incidence of beta waves is balanced between the two hemispheres of the brain, indicating what seems to be an unusual equality between left and right brain thinking.

However, what do these findings have to do with mystical experience? The author offers a description of the elements of the mystical experience, but provides little evidence that any of the subjects – although described as experienced meditators – involved in the laboratory research upon which she draws were actually experiencing these elements to any marked degree even at the fifth level. And herein lies one of the problems of current research into MBSR – the impression given is that it is not carried out by those who have experienced deep mystical states themselves nor is it conducted with those who have. Nevertheless, as Dr. Nataraja rightly implies, if meditators are kept aware of their brain wave patterns this may provide them with objective knowledge of their levels of practice, and may help them – through a form of bio-feedback – to work on progressively

deepening their experiences. However, she then proceeds in a later chapter entitled 'Bridging Science and Spirituality' to make a more contentious claim that current scientific investigations such as the ones she describes 'should inform our spiritual investigations and vice versa', and that from this cross-fertilisation a new scientific field known as *neurotheology* is developing that not only highlights the importance of ritual and myth and the leap of faith, but that raises what she refers to as 'the inevitable question' whether or not it may 'eventually prove or disprove the existence of God'.

This seems to me to go too far. Neurotheology may indeed aim to identify the structures and processes in the brain that researchers consider accompany mystical experiences, but this risks over-simplifying the nature of these experiences. Even within the spiritual traditions meditation is rarely taught as aiming directly at mystical states. Such states are recognised as arising spontaneously, sometimes in meditation but frequently in the course of ordinary everyday life. A Zen nun on seeing the moon reflected in a pail of water; St. Paul on the road to Damascus bent on persecuting Christians; Jacob Boehme on seeing the sun reflected in a pewter bowl; Dr. Richard Bucke (who coined the term 'cosmic consciousness'), while travelling in a hansom cab. Other people such as the poet William Wordsworth have mystical experiences when in the presence of nature, others when near death or in moments of crisis, William Blake and many religious figures during dreams – and so the list goes on. Certainly the minds of those concerned may in some cases have been prepared by years of meditation or other spiritual practices, but whether at the moment of their mystical experience even these people were manifesting the brain states identified by Dr. Nataraja in her five levels of consciousness is unclear.

In a book of under 250 pages Dr. Nataraja cannot be expected to look more widely at all the varieties of mystical experience, but caution is certainly needed in the way in which mystical states are linked to the brain processes revealed during laboratory research. It is all too easy to assume that because we notice during this research that certain of these processes are correlated with deep subjective states we can somehow go

on from there and draw firm conclusions on the interaction between the two, or that neurotheology may help determine the existence of God. I am not claiming that Dr. Nataraja is herself guilty of such assumptions, but those reading her book should be careful to avoid making them for themselves on the strength of the evidence she presents. We know far too little about the relationship between brain and mind, and far too little about spiritual realities and the nature of genuine mystical experience to fall into such a trap

In spite of these cautionary words I rate this book highly. Informative, well-balanced, and with very good concluding chapters respectively on meditation and health and on meditation in daily life, it provides a welcome resource for all those interested in research into the brain-related changes consequent upon meditation. An excellent purchase.

*Professor David Fontana is the author of a number of books on meditation including **The Meditator's Handbook** and **Learn to Meditate**. He is a Fellow of the British Psychological Society.*

More than Meets the I

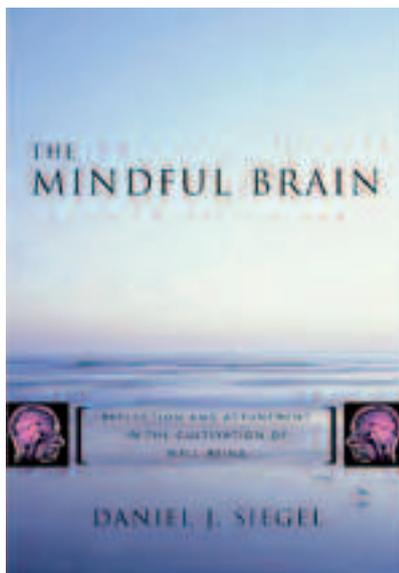
David Fontana

THE MINDFUL BRAIN

Daniel Siegel

W. W. Norton & Co. 2007, 387 pp.,
£26.95, h/b. – ISBN 13: 978 0 393
70470 9

I start this review with something of a quibble. In his opening chapter Daniel Siegel tells us that he has 'found a useful definition of the mind, supported by scientists from various disciplines, to be 'a process that regulates the flow of energy and information'. This is something of a surprise, reducing the mind as it does to the status of a mere regulatory device. As the mind is a matter of direct experience, I wonder how many readers would think that such a definition is sufficient to explain the nature of their own mental lives. A regulatory device and nothing more? This seems to ignore completely the creative aspects of mind, and even its role in the processes of thought. Things become even more puzzling when a little later Siegel argues that 'With mindful awareness the flow of energy and information that is our mind enters our conscious attention ...' This argument appears to separate 'mind'



from 'consciousness', and a further dichotomy comes later when he tells us that '... mindfulness helps us awaken, and by reflecting on the mind we are enabled to make choices and thus change becomes possible'. So mindfulness allows us to reflect on the 'mind', which seems to separate 'mindfulness' from the mind itself. All very puzzling, especially as he goes on to say 'How we focus attention helps directly to shape the mind', which begs the questions of who or what it is that focuses attention if it is not the mind itself.

This is a rather unpromising start. Philosophers have been trying to define the mind from Plato onwards, and the salient fact to emerge from their attempts is that not only is there no real agreement, the task itself seems impossible. Since the mind is a matter of direct experience, attempts to define it are rather like a closed system trying to obtain a view of itself. In *Julius Caesar* Cassius asks Brutus 'Tell me good Brutus, can you see yourself?', to which Brutus replies 'No Cassius, for the eye sees not itself but by reflection.' Just so. But whereas the eye has a mirror to help it study this reflection, the mind does not. If Siegel really wishes to look at attempted definitions of the mind he should perhaps have outlined some of the difficulties involved, and spent rather longer on the task than a few sentences. Perhaps part of the problem is implicit in the title of the book, *The Mindful Brain*, which suggests that mind is simply a term given for various functions of the brain, a reductionist approach that may do insufficient justice to mental activity. This suggestion is strengthened

by the blurb accompanying the book, which refers to 'the idea that our awareness of our ongoing experience creates an attunement, or resonance, within ourselves that harnesses specific social and emotional circuits in the brain ... [stimulating] these 'resonance circuits' to grow – a growth that transforms a moment-to-moment state of mindful awareness into a long-term state of resilience'. Surely, but a danger lies in the implication that this is the *only* result of an awareness of ongoing experience.

In fact there is no real need for Siegel to attempt a definition of the mind. Since the book is about mindfulness it is sufficient to focus on mindfulness as a process of internal reflection, a process that is defined in meticulous detail in the relevant Buddhist texts, in particular the *Suttipatana Sutra*, the most revered of all discourses in the Theravadin tradition. One does not have to be a Buddhist to appreciate the quality of analysis involved in these texts; they can be approached as psychological treatises. Anyone reluctant despite this to turn to literature from the great spiritual traditions can go instead to one of the Western commentaries upon them, such as Wallace 2006 and 2007 (the latter book, sub-titled *Where Buddhism and Neuroscience Converge*, is particularly appropriate). In fact, Wallace's excellent work is only referred to in half a page towards the end of *The Mindful Brain*, a strange omission as it would have further illuminated much of what is said by Siegel.

Also noticeable by their absence are the many transpersonal psychology texts that touch on mindfulness, such as Tart (1994) and Lorimer (2001), an omission equally noticeable in other recent books on the scientific approach to awareness training. It is as if science is happy to discount much of what has gone before, and focus simply upon the measurable changes in the brain consequent upon extended meditation practice. We do not experience ourselves as measurable changes in brain circuitry, and I think it important that this be made clear in any book dealing comprehensively with mind training.

Having got these quibbles off my chest, I can now turn to what is in other ways a commendable and welcome book. Given that many neuroscientists are only likely to take mindfulness training seriously if it can be shown to have physical consequences, I welcome a text that summarises, in a

scholarly yet highly readable way, the reality and nature of these consequences. Irrespective of the direction from which we approach mindfulness, a book of this quality provides highly relevant and informative reading. Mindfulness meditation brings a range of mental and physical benefits (even the relaxation and retardation of the breathing is of value to the body), and the harder the evidence, the more likely is it that science will take due note of the fact.

Another strength of this book is that it gives very clear and helpful guidance on how to practise mindfulness, both while sitting in meditation and in daily life. It explains clearly what is meant by awareness, and calls importantly upon the author's personal experience and his own sensitive and compassionate attitude towards others. An a graduate of the Harvard Medical School and Director of the Mindsight Institute, Daniel Siegel is interested not only in brain circuitry but in the positive effects that meditation can have upon the way in which we live our lives. It is a mine of information on the relationship of mindfulness to feelings, to the regulation of emotions, to reflective thinking, to openness, to the dissolution of mindsets, to reflection, to education and to much else besides. Predictably perhaps, there is no mention of the spiritual benefits of meditation, or its relation to the contemplative techniques of the Orthodox Church and other Christian traditions, and although Buddhism receives a few brief mentions there is no reference to Vedantic or other Hindu traditions. Daniel Siegel would argue that his intention was to focus on mindfulness and neuroscience, and not to stray into more esoteric matters, but the pity is that this will rather restrict his readership. In my experience people do not take up mindfulness practice either as a psychology or as a neuroscience. They take it up as a spiritual practice or as a way of seeking meaning in life, and this is how it has been traditionally used – and developed – down the centuries. Without motivation of this kind, I doubt if we would be fortunate enough to have the practice in its present form. In a book as otherwise comprehensive as *The Mindful Brain*, it is a pity that mindfulness as a spiritual practice receives no direct mention, and is only alluded to obliquely in occasional brief references.

However, this is to hark back to the quibble with which I commenced this

review. It is more appropriate to conclude with unreserved praise for Daniel Siegel's comprehensive survey of the relationship between mindfulness and brain activity. Highly recommended to all those intent on discovering the very real neurobiological effects of training the mind in the time-honoured practice of focused awareness.

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The Emptiness of Physics

Chris Clarke

TIBETAN BUDDHISM AND MODERN PHYSICS: towards a union of love and knowledge

Victor Mansfield (SMN)

Templeton Foundation Press, 2008, \$19.95, xii +180 pp., p/b - ISBN 978-1-59947-137-X

This is an interesting addition to the growing body of books on Buddhism and Physics (239 of them, according to Amazon.com). Compared with Alan Wallace's *Hidden Dimensions*, which I reviewed here recently, Vic Mansfield's lacks Wallace's majestic scope, but is more practical and down to earth. Both are based in the Tibetan Middle Way (*Madhyamika*) school and both focus on its key principle of 'emptiness' (*sunyata*). But whereas Wallace tries to convey what it is like to be 'immersed in the nonconceptual realization of emptiness' and compares this to the succession of different sorts of vacuum in the earliest stages of the universe, Mansfield illustrates emptiness by reference to a wooden post in the back of his garden (photo, p. 47) and compares it with quite graspable laboratory experiments on particles. I have to admit that I find this latter approach more convincing, though lacking the 'wow factor' of the former.

Emptiness, at least at the garden post level, is the truth that no *thing*

has an absolute existence entirely in its own right; rather every thing owes its nature and its existence to its relationships with all other things around it and before it (a fact also pointed out by Spinoza). Most importantly, my own self has no independent existence. 'Self' is an ongoing process which, perhaps even more obviously than Mansfield's post, owes its being to our web of relationships. The realization of the relativity of our own self and, to use Thich Nhat Hanh's word, our *interbeing* with all other organisms, opens us to a deeply grounded compassion for all. Physics becomes directly relevant here, because it portrays all matter as existing as a web of connections independent of time and space, having no autonomous existence separate from the whole. Mansfield stresses that physics has a special role to play here in spreading this message, because the language of physics has become global; it is 'transportable' across cultures, often more freely than is religion.

While this core message gives the book great value, the account is sometimes marred by a seemingly dogmatic adherence to a traditional approach to physics. He rests his arguments solidly on the notion of the 'collapse' of the quantum state, making no reference to work which has now brought the no-collapse approach to a dominant position¹. From this he argues the impossibility of meaning or purpose in the universe (an argument well demolished recently by Stuart Kauffman). These small objections dissolve, however, in the face of the profound poem by Naomi Shihab Nye with which he ends the book. I quote a few lines:

Before you know kindness as the deepest thing inside,
you must know sorrow as the other deepest thing.
You must wake up with sorrow.
You must speak it till your voice catches the thread of all sorrows
and you see the size of the cloth.
Then it is only kindness that makes sense anymore

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medicine-health

To CAM or not to CAM?

Beata Bishop

TRICK OR TREATMENT? Alternative Medicine on Trial

Simon Singh, Edzard Ernst

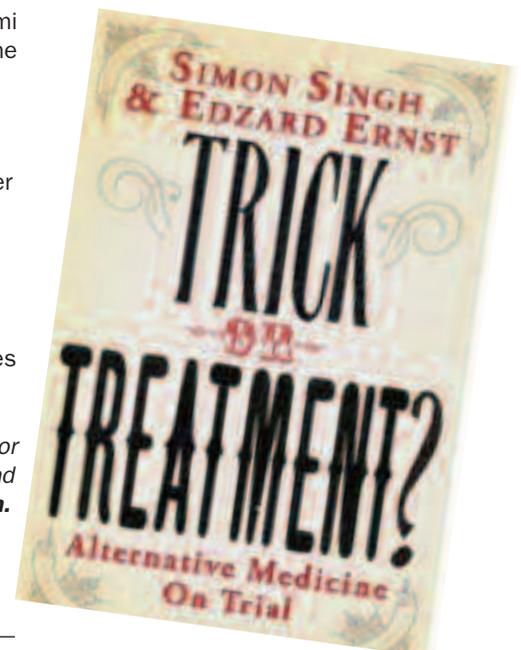
Bantam Press, 2008, 342pp. £16.99, h/b - ISBN 978-0-59306-129-9

CANCER – THE COMPLETE RECOVERY GUIDE

Jonathan Chamberlain

Long Island Press, Brighton, 2008, 355pp. £17.99, p/b - ISBN 978-0-9545960-1-9

Not for the first time, Professor Ernst has launched a full frontal attack on alternative medicine which, he claims, includes complementary therapies as well. The most interesting thing about this handsome volume, written with science journalist Simon Singh, is the mass of contradictions it contains. To start with, Edzard Ernst is the world's first professor of alternative medicine, yet he continuously discredits and ridicules the very subject he is supposed to teach. Next, he endorses a dictum of Hippocrates – 'There are, in fact, two things, science and opinion; the former begets knowledge, the latter ignorance' – but what we get, especially in the Rapid Guide to some 36 alternative therapies (all of which happen to be complementary) are Professor Ernst's opinions. There are many more non-sequiturs scattered



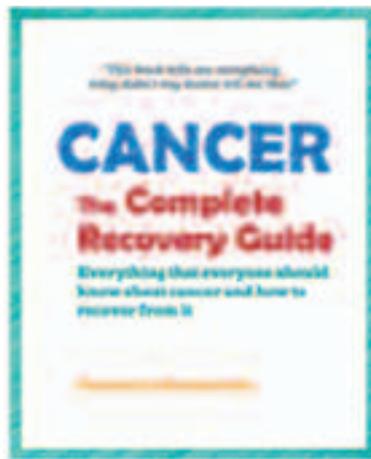
¹See the survey by Maximilian Schlosshauer, "Experimental motivation and empirical consistency in minimal no-collapse quantum mechanics", *Ann. Phys.* **321**, 112-149 (2006)

throughout the text, e.g. that while we are told repeatedly that homeopathic remedies are nothing but placebo, yet on p. 142 we read that 'even homeopathic remedies, containing no active ingredients, can carry risks.'

The main part of the book concentrates on four well-known and popular CAM therapies: acupuncture, homeopathy, chiropractic and herbal medicine. All four deserve thorough scrutiny and a precise, objective analysis of their areas of usefulness or failure. Unfortunately that's not what they get. The book's subtitle, 'Alternative Medicine on Trial', presumes the subject's guilt, and the authors' claim to deliver 'the ultimate verdict on alternative medicine with clarity, scientific rigour and absolute authority' adds a thunder of finality.

But the thunder soon turns hollow. There is a list of suggested further reading, one third of the items being by Prof. Ernst *et al.*, but in vain do we look for references. There aren't any. Instead, we get vague phrases, like 'Critics point out....' Who are they? We are not told. Other statements contain words like *may*, *might* or *could* – namely cause harm to patients (or not). There is even less scientific rigour in the way facts are twisted and spun to support the promised ultimate verdict. One prize example concerns the 1854 cholera epidemic in London, when 'patients at the London Homoeopathic Hospital had a survival rate of 84%, compared to just 47% for patients receiving more conventional treatment at the nearby Middlesex Hospital'. One might think that this proves the success of homeopathy, but no – the unnamed critics point out that the patients attending the Homoeopathic Hospital *might* have been wealthier, better fed and healthier before falling ill than the patients at the Middlesex; which helped them to recover; standards of hygiene at the latter *may* have been poorer, and finally the higher survival rate at the homeopathic hospital 'was not indicative of the success of homeopathy, but rather it pointed to the failure of conventional medicine.' QED.

After this illogical cartwheel it's not surprising to be told that the stunning results of acupuncture, as performed in Chinese hospitals and shown on British TV, were faked – the results were 'too good to be true', we read (isn't that an opinion?). Even the WHO gets its knuckles rapped for endorsing acupuncture. And there is a horror story of an Austrian acupuncturist (no



reference, no details) who allegedly killed a woman patient by piercing her heart with his needle. Sounds impossible? Ah, the woman had a hole in her sternum and the needle, with uncanny precision, found its way through it. There are other equally unreferenced stories to show the risks of alternative medicine. Chiropractic handling of the upper spine can cause strokes, and taking X-rays of patients can cause cancer (but X-rays taken in conventional medicine can't?). Acupuncture can cause fainting, nausea, vomiting, and, above all, infection. Herbal remedies can be contaminated and may be ineffective. Homeopaths are dangerous, because they oppose the vaccination of children and, worst of all, take the place of conventional doctors. In brief, CAM is dangerous. However, considering the series of scandals over the past few years, exposing the dangers of 'safe' pharmaceutical drugs – step forward Vioxx, Prozac – and the alarming growth of iatrogenic illness, this worry seems exaggerated.

Ernst repeatedly attacks the Prince of Wales for his support of CAM – the book is snidely dedicated to him – and ridicules him for suggesting in 2004 that the anti-cancer Gerson therapy should be investigated for its possible benefits. Alas, he then displays his ignorance by writing that 'the potentially harmful Gerson therapy starves already malnourished patients, depriving them of vital nutrients.' In fact this therapy *is* based on hypernutrition, with patients consuming some 20 lbs of organic fruits and vegetables a day, partly in the form of juices. Research first, attack later might have been wiser.

And yes, of course there are badly trained or incompetent CAM therapists, just as there are incompetent doctors. But last year over seven months some

10,000 UK patients suffered serious adverse reactions to prescribed drugs; how many cases have been reported during the same period of life-threatening conditions caused by vitamin tablets, herbal remedies or an overdose of acupuncture?

All in all, this biased, unscientific book is worthless in itself, yet worth challenging, for it represents an outdated, Cartesian attitude which ignores all current worldwide research into dietary therapies, nutrition (does Prof. Ernst know the difference between those two?), the psychosomatic connection, and the rigorous scientific exploration of – yes, complementary therapies. More damagingly, it reinforces the current attempt, orchestrated by commercial interests, to legislate all nutritional supplements, natural remedies and treatments out of existence, via *Codex Alimentarius* and weird EU directives. *Cui bono?* We hardly need ask. Since hi-tech modern medicine, wonderful in acute and emergency cases, can only offer symptomatic treatment against chronic degenerative diseases, alternative methods should be objectively examined and, if found effective, widely used.

This is the drift of Jonathan Chamberlain's *Cancer – The Complete Recovery Guide*. The author is a former teacher, now full-time author, with no medical background. But when his wife was diagnosed with cervical cancer 15 years ago, he desperately looked for a book that would contain information on every possible alternative and complementary therapy to help her recover. He found no such book. She underwent all available orthodox treatments and died a year later. He decided to write the missing book – the one under review – himself.

His sole purpose has been to inform and educate, not to recommend any of the thoroughly researched alternative therapies. Like a good teacher, and unlike Professor Ernst, he respects the reader and keeps stressing that everyone must make their own decision as to which modality to choose, and be responsible for that choice. This 'travel guide to the strange country of cancer' begins with an explanation of the essence of the disease and its many causes ('It hasn't come from Mars'); it continues with an objective description of orthodox treatments, their risks and benefits, and ways to reduce their often distressing side effects. Throughout the tone is clear, objective, modest but knowledgeable.

It becomes sharper when we reach the subject of cancer research and its many flaws. Ethics and the control of research by drug companies come under dispassionate factual scrutiny. So does the alarmingly close bond between medicine and Big Pharma, as defined by some distinguished doctors outside that bond. All in all, the first 96 pages of this big book give the lay reader the kind of all-round information that is invaluable in health and possibly life-saving once cancer has struck. Chamberlain is not against doctors, only against their lack of knowledge outside school medicine's tight box.

The rest of the book describes a large number of complementary and alternative approaches, including diet, nutrition, herbs and botanicals, biological therapies, energy medicine and more. Entries are arranged in alphabetical order, giving availability and other references but making no claims for any healing potential. Indeed, the all-pervading message to the reader is to read, research, compare possibilities and then choose responsibly – an important reminder in an area where most people are too reliant on 'the experts' and too unwilling to do their own thinking.

Chamberlain's chapter on 'Cancer Pioneers and Outcasts' shows the heavy penalties suffered by those who dare to step out of line and are more interested in finding new ways of healing than in their career chances. Case histories of recovered patients strike a positive note, just like the benefits of well-run support groups, which diminish the sense of isolation that many cancer sufferers experience.

As a recovered cancer patient myself, I believe that Chamberlain's comprehensive book is filling a big gap in the available literature on CAM, which tends to concentrate on individual therapies and substances, without presenting all available modalities. This volume is almost too comprehensive, which is why the author has also produced a smaller *Cancer Recovery Guide* (Clairview Books, 2008, £9.95), with only 15 CAM strategies for restoring health, as a quick reference for people in a hurry.

My only criticism is that references are given within the text, not set out and listed in the usual way, and therefore are impossible to find quickly. I hope this will be put right in the next edition. There should be one soon.

Beata Bishop is author of ***A Time to Heal***

Glad Handers and Gland Handlers: a chronicle of medicine run amok

Martin Lockley

CHARLATAN: AMERICA'S MOST FAMOUS HUCKSTER, THE MAN WHO PURSUED HIM AND THE AGE OF FLIMFLAM

Pope Brock

Crown Publishers New York, 2008, \$24.95, h/b - ISBN 978 307 339881

For anyone interested in scientific and medical history in early 20th Century America and Europe, and its extraordinary intersection with society and the emerging mass media, I cannot recommend Pope Brock's book *Charlatan* too highly. Brock's masterful and highly entertaining historical research is an eye-opening exposé of the murky regions of our individual and collective psychology that penetrates some of humanity's deepest unconscious cravings. Set in the post World War I 'unraveling' of the roaring twenties, Brock traces the complex cultural threads that allowed an infamous snake oil charlatan - Dr. John Brinkley - and others of his ilk to operate a highly lucrative goat gland implantation business in the sleepy town of Milford, Kansas. Astonishingly, many in the local farming community and far away, among the aristocracy of the Orient, opted for goat nut implantations and inseminations (*liquide testiculaire*) in their supposedly withered scrota. Despite an inept start to his crooked life the ethically bankrupt Brinkley was no fool. Unlike legions of fraudsters who had obtained fake M. D. certificates, Brinkley, who also lacked any such bona fide credentials, had undergone some rudimentary medical training, and was adept at manipulating the opinion of his political connections to help his fraudulent schemes.

Thanks to the fear of impotence, the promise of *elixir vitae* miracles, and the encouragement of many an American housewife who 'like the hart that panteth for the running brook,' and lamenteth her spouse's shortcomings, Brinkley's clinic filled with clients eager to purchase billy-goat bravado at \$750 a shot. Among his elite clientele the *testes* of chimps (already in short supply as a result of this demand) and even humans (mostly death row convicts and impoverished donors) helped inflate the procedure's price tag at a cool \$5,000.

Shocking as all this sounds to the more ethical sensibilities of today, Brock is wise enough to see the hucksterism in the context of the history of medical science, and what might euphemistically be called experimental procedure. Brinkley and his many European counterparts (e.g., Sage Voronoft and Eugen Steinach – related to Eugenics?) operated around the time when the 1923 Nobel Prize was awarded for the isolation of the pancreatic hormone insulin. Meanwhile 'sex gland' research was leading to 'milestones like the synthesis of testosterone in the 1930s and carrying right through to doping with anabolic steroids' so much in today's news.

The antics of such charlatans were nevertheless shocking if not fatal, especially in the eyes of Morris Fishbein, author of such books as *Medical Follies*, who became the American Medical Association (AMA) attack dog and 'quackbuster' extraordinaire. Although well-motivated and admirably effective in curbing flagrant excesses - including Brinkley's - he was 'prone to go overboard and ... [when] ...battling apostates and renegades, he tossed out the baby with the bathwater more than once.' Can one separate the wheat from the chaff when investigating the strengths and weaknesses of alternative and conventional medicine?

Fishbein's legendary persistence and energy - described as a 'cosmic accident' was matched only by Brinkley's bravado: '[I] think of three ways to get rich before breakfast.' Undeterred by Fishbein's success in getting Brinkley's medical licenses revoked in Kansas and elsewhere, or the shame of public exposure attributed to the many fatalities his butchering surgeries had caused, rather that crawl off 'whimpering into the shadows...Brinkley's response was to run for governor.' In the process he invented all the strategies of modern American campaigning and 'fused politics and broadcasting on a scale no one had conceived before.' When his Kansas, snake-oil radio stations came under investigation, he skipped across the Mexican border to build the world's most powerful transmitter, and broadcast quite literally to the whole world. The million watt signal, illuminated car headlights, turned wire fences into receivers, drowned out other mainstream stations and was received in Finland and the Soviet Union. In the process,

of selling his snake oil, he launched some of America's best known and most successful Country Music stars.

All the while he peddled his anti-authoritarian message, shamelessly playing the evangelical martyr card: 'I too have walked up the path Jesus walked to Calvary! I stood in Jesus' tomb! I know how Jesus felt.' All this while storming into rallies in his blue and gold plane, bedecked with white suit, straw hat and conspicuously gaudy, diamond-studded rings and tie pins. He was indeed rich enough to visit Jerusalem, Palestine and Bethlehem, and incidentally had conned Pavia Medical School out of one of only three honorary degrees they had ever given. The other two being to Napoleon and Michelangelo! When Fishbein blew the whistle 'the degree was personally revoked by Benito Mussolini, [though] Brinkley claimed the degree for the rest of his life.'

As the election approached, his two rivals feared defeat from Brinkley's independent campaign, and because, as a late entry, his name was not actually printed on the ballot, they resorted to a technical subterfuge, demanding that only votes cast with the precise designation 'J. R. Brinkley' would count. Even with this handicap he lost by the narrowest margin, while unexpectedly carrying two counties in Oklahoma, where he was not even registered as a candidate! Exploiting young son Johnny as a vote-winning gimmick, the poor lad was heard to lament to the glad handing, gland handler: 'I don't want to shake hands anymore.'

The inevitable Brinkley-Fishbein courtroom showdown came in 1939. 'Great opponents over time grow more and more alike' and ... have 'more in common than either would have admitted...workaholic masters of self promotion ...brilliant and indefatigable

talkers who could hypnotise large groups.' Much was at stake. Had Brinkley won, his bravado would according to some have carried him to the White House. But his luck ran out. Ironically Brinkley inflicted the trial on himself by pre-emptively suing Fishbein for defamation of character, before being named in a malpractice suit. Brinkley's lawyer was frazzled and inept - Fishbein's calm and collected, drawing Brinkley into admissions of his own malpractice, and exorbitant wealth as if they were as natural and normal as Brinkley's warped philosophy. They almost were normal 'given the Jurassic state of malpractice laws in Brinkley's day ... and America's deep reluctance to criminalise greed.' So finally Brinkley lost his case and was ruined, both physically (from a heart attack and blood clot-induced leg amputation) and financially from the landslide of suits, but in 1942 he died 'one of the most famous people in the United States' skipping town for the final time he 'just escaped [further] multiple prosecutions.'

His legacy is still with America. Pharmaceutical companies barrage a gullible citizenry with the promise of cures for aging and erectile dysfunction (promising 'pole position')! Politicians in their pockets perpetuate 'electile dysfunction' and meanwhile the intriguingly-bizarre cesspool of talk radio drones on. Brinkley's border radio station (XERA) was taken over by none other than 'howling Wolfman Jack' who graduated from Country to hard core blues and R & B' while still peddling naughty sex-stimulating pep pills. The goat in wolf's clothing is dead - long live the Wolfman!

Professor Martin Lockley teaches palaeontology and consciousness studies at the University of Denver.

Research as Discovery

Charmian Wyld

ACUPUNCTURE RESEARCH: STRATEGIES FOR ESTABLISHING AN EVIDENCE BASE

Hugh MacPherson (SMN) et al

Churchill Livingstone 2007, 288 pp., £28.99, p/b - ISBN 978-0-443-10029-1

It is no longer unusual to consult an acupuncturist or find pain relief delivered via a physiotherapist's acupuncture needle. Half a century of

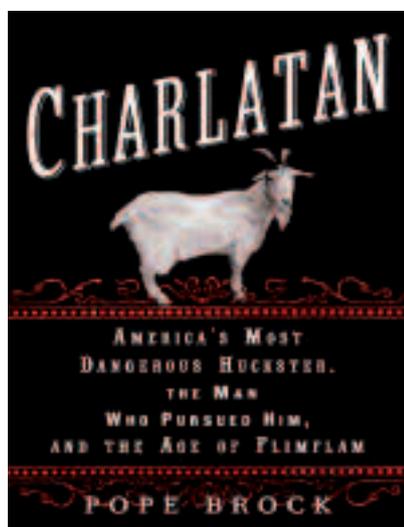
astonishing conventional medicine has not succeeded in eliminating traditional techniques like acupuncture, a situation that has set alarm bells ringing within the domain of conventional science. How can so many put their trust into a medical system that has a weak and limited evidence base to prove efficacy? Some within the scientific establishment (Colquhoun, Baum, Dawkins) think this state of affairs can only be explained by a return to irrationality and superstition. 2007 has seen the publication of a number of books ('*Trick or Treatment*', Ernst and Singh, '*Snake Oil Science*', Barker Bausell, '*Suckers: How Alternative Medicine Makes Fools of Us All*', Shapiro) that conclude that real and sham acupuncture deliver the same level of benefit and therefore acupuncture 'works' by exploiting the placebo effect and is thus dependent upon relief.

The acupuncture profession cannot entirely brush off these findings. Cochrane reviews of clinical trials for acupuncture are controversial and suggest that the evidence for acupuncture is weak. It is however acknowledged that some trials have been poorly conducted, the mechanisms of acupuncture are unclear and in the UK, research funding for CAM in 2005 was 0.0085% of the total medical research budget. (UK clinical research collaboration 2006).

The publication of *Acupuncture Research* confronts the key issues that arise in the evaluation of the clinical practice of acupuncture. The authors clearly identify the difficulties in adopting the methodology of conventional research to the complex intervention of acupuncture, with its vast array of styles and practice. Further, there is a conflict between the poor evidence recorded in RCTs (Random Controlled Trials) versus the immense satisfaction and public demand that acknowledges acupuncture as a solution to a wide range of health problems:

Acupuncture..... poses a specific and as yet unanswered challenge to the dominance of biomedicine. It is clear that acupuncture has a fundamentally different understanding of the body than conventional medicine, one that can lead to a remarkable resonance with the experiences of the patient. (*Introduction*)

The book opens with a consideration of why doing research in



acupuncture is important: to attempt to understand how it works and to discover and promote best practice. This may seem obvious but to many working acupuncturists, there is little point in conducting research as day to day clinical experiences confirm the sense of 'I know it works, I don't need to prove it'.

There are many critical questions that need to be tackled: In Chapter 3, **Patient patterns of use and experience of acupuncture**, the authors explore some of these: For example, how do we measure the success of a clinical outcome:

Is it relief of symptoms.... Or a sense of being cared for body, mind, spirit or increased self-efficacy or all of these? What is healing? What part does the practitioner-patient relationship play in healing....

And how do we frame questions that measure subtle perception that guide experience:

....asking 'How painful is acupuncture on a scale 1-10?' assumes people define or experience pain in a similar way, but they do not (Bates et al 1995, Emad 1994, Morris 1991).

The authors of this chapter, Cassidy and Thomas, conclude that the key issue in designing research questions is to:

....remember that we learn about meaning by asking and listening and that our task is to ask the patients and practitioners and pay attention to context.... to be led not by theory or assumption but by the emergent data itself.

Measuring Patient-Centred Outcomes (Chapter 5) expands on these ideas:

Unless the whole range of patient-centred outcomes is measured, the unique contribution made by acupuncture and other holistic interventions may not be fully evaluated.

The safety of acupuncture is fully discussed in the fourth chapter and ideas raised are well beyond the confines of the acupuncture profession: For example, does the expectation of pain seem to be associated with more experienced actual pain at the site of needling? Are there patient characteristics that help us predict a higher likelihood of a negative reaction? Are some patients more

prone to fainting? Some acupuncturists, as they gather clinical experience, may claim to recognise 'tendencies' in patients and successfully predict those likely to experience needle shock, adjusting treatments accordingly but what information is brought used or are we merely (but importantly) inventing an idea based on intuition?

Exploring Treatment Effects (Chapter 6) counters much of what has been said by Bausell and Ernst by exploring the difference between the 'clinicians way of thinking' and that of the scientist:

.... to a scientist, reports of grateful patients are not.... proof that acupuncture is effective: the patients could have improved spontaneously....

Chapter 7 compares treatment effects of acupuncture and other types of healthcare and Chapter 8 focuses upon the components of acupuncture treatment with regard to placebo and natural history/regression to the mean. For acupuncturists this raises further questions, does acupuncture treatment evoke an alteration in the progression of a condition (ie some sort of healing crises) which is a valid part of recovery?

we are asking the wrong questions as it pertains to acupuncture: the value of acupuncture might be in how it modifies the trajectory of illness and the patient's ability to heal.

Acupuncture Practice as the Foundation for Clinical Evaluation

(Chapter 9) at last dares to address the 'problem' of Qi. It is something of a relief to read how simplistically this concept has been translated as 'energy' 'an analogy that gives acupuncture plausibility but limits scientific enquiry and biases research' The consequence is that;

inadvertently, those interested in acupuncture as an alternative to biomedicine have perpetuated a pre-scientific view of acupuncture by reviving vitalistic ideas that assume a non-physical entity, force or field ... these notions have maintained the notion that Chinese Medicine principles are incompatible with modern science and have created a split between the scientific community and practitioners of acupuncture.

The solution, sensibly suggested, is for a

new working definition of Qi that considers it not a force but a model' (an example that would help the cause of many other CAM modalities) and do much to allay the well placed concerns cited rationally, belief and superstition. It might be possible to explore the use of diagnostic categories in Chinese Medicine to be understood and used as 'clinical metaphors' enabling the practitioner and patient to 'navigate' and make sense of an experience of ill-health. This is quite a different expectation to the emphasis biomedicine places on short term, narrowly defined outcomes and raises the potential for greater understanding within all systems of medicine. The chapter also examines the debate initiated in the work of *Volker Scheidl*, regarding what constitutes the best basis for clinical evaluation and treatment, how have certain TCM diagnosis been formed, by whom, when and with what political and cultural influence. (The example of menopause is used in this discussion).

Physiological Dynamics of Acupuncture: Correlations and Mechanisms

(Chapter 10) reviews a broad range of laboratory-based studies that examine how acupuncture might work with emphasis upon the entire therapeutic encounter with a practitioner rather than merely the action of the insertion of a needle. This includes the notion of practitioner intention, should we be teaching practitioners to *block their intention* when needling so we could compare needling with and without 'intention'. An interesting discussion of biomedical correlates of acupuncture points and meridians, brain imaging and neural pathways follows and the fascinating idea that the entire acupuncture meridian system could be conceived as an:

.... Interconnecting web, with acupoints as the sites of pathway crossings.... In this view, the web or acupuncture system can be accessed and activated at sites anywhere on the body with acupuncture points representing the best sites of access, a concept that has important implications for point specifically as well as the use of sham needling protocols in clinical trials.

Evidence overviews: the role systematic reviews and meta-analysis (Chapter 11) is useful reading for those familiar with the analysis and assessment of published research. This includes easy to understand, helpful sections on understanding useful tools such as 'The Jadad Scale', 'Understanding Forest Plots' and the practical guidelines for undertaking research described in Chapter 12.

In conclusion there is now a large number of acupuncturists who have spent 20 plus years in practice, and in one sense, have carried out a large scale experiment in testing out the different theories and styles of Chinese Medicine, at times adding other strands of knowledge sometimes borrowed from other therapies, (for example, psychotherapy). A rigorous process of improving educational standards and codes of clinical practice have been developed and where 20 years ago, a doctor risked ridicule for referring patients for acupuncture, now it is acceptable. Patients will continue to seek out acupuncture treatment and perhaps Lewith's reasoning in the final chapter explains why:

Acupuncture is an example of an approach that is perceived as a whole system involving therapy, practitioner and patient rather than divorcing the therapy from those who provide it in a way that many have tried to do with conventional clinical bioscience. Perhaps through these cross cultural perceptions we may begin to consider the relative balance of various 'truths' and develop a truly integrated understanding of the sociology and anthropology of medical practice.

This landmark text responds to the critics of Chinese Medicine who accuse us of a return to superstition and unreason. It reveals the weaknesses in the argument of Ernst and his followers but it also cautions acupuncturists that research is a process of genuine discovery; it is not possible to predict where that may lead:

..... what will emerge over the next 20 years may only have limited connection with what practitioners feel they may now define as 'acupuncture'.

Charmian Wyld, *School of Health and Bioscience, University of East London*

Altruism and Health

David Lorimer

WHY GOOD THINGS HAPPEN TO GOOD PEOPLE

Stephen Post, PhD and Jill Neimark

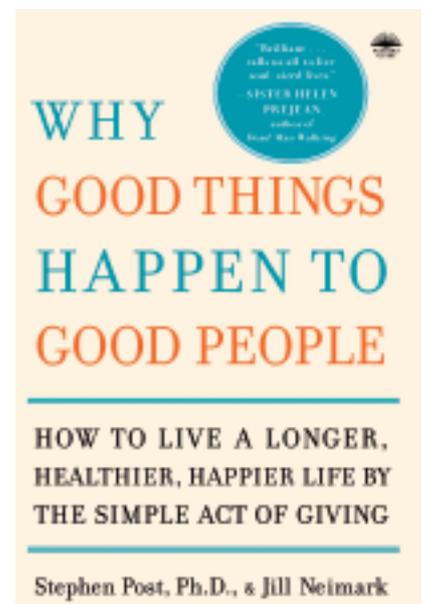
Broadway Books, New York, 2007, 302 pp., \$23.95, h/b – ISBN 978 0 7679 2017 9

Over 50 years ago, Pitirim Sorokin was pioneering research into altruism and health at Harvard University. The outcome of this work was a book *The Ways and Power of Love*, which was reprinted in 2002 with an introduction by Stephen Post, who now runs the Institute for Research on Unlimited Love in the medical school at Case Western University, where he is also professor of bioethics. This institute was set up with the support of Sir John Templeton, who felt that insufficient research effort was being devoted towards topics such as love, wisdom and forgiveness. Post tells the story of his initial encounter with Sir John, and outlines the work of his institute. The bottom line of this book is that scientific research has now proved the link between doing good and living a longer, healthier, happier life. At a time when the consumerist dream is falling apart, this is a timely and welcome reminder of the true nature of human fulfilment, which is grounded far more in our relationships than in individual satisfaction.

The book introduces the Love and Longevity Scale, based on ten ways of giving. The context is the four domains of family, friends, community and humanity. The ten ways, which form the structure and substance of the book are celebration, generativity, forgiveness, courage, humour, respect, compassion, loyalty, listening and creativity. The structure of each chapter includes the implications of research reports, lessons from the frontiers of research with practical suggestions, and a 20 question exercise, consisting of a statement with six possible responses from 'strongly agree' to 'strongly disagree'. The first chapter on celebration invites the reader to turn gratitude into action, with recommendations such as savouring the day, keeping a gratitude journal, celebrating other people, and finding inspiration in nature. The questionnaire is phrased both positively and negatively for instance 'I make a point of letting my family

members know how much I appreciate them' or 'I feel like I owe my friends nothing when it comes to any of my accomplishments in life.' One can then add up one's score and find out which percentile one falls into. Naturally, if one is honest, the exercise will provide an insight into areas in which one could improve one's life. There are many inspiring quotations and stories throughout the book. Here is Gandhi: 'The difference between what we do and what we are capable of doing would suffice to solve most of the world's problems.'

The chapter on courage is especially good. We are encouraged to speak up and speak out, and courage is defined as love in action, love that forces change. It is quite right to say that 'Courage is the hallmark of every human who has changed the world, from Jesus to Joan of Arc.' However, as the authors point out, every life has its moments of quiet heroism. The word itself is derived from the Latin meaning heart, so that encouraging people is supporting their heart. It often requires that people reach a turning point in their lives where they deconstruct an old sense of self and reconstruct it around different priorities. I liked the view of Pastor Carl Wilkens when he says 'real courage comes when you come up against something that far exceeds you. Real courage is about submission and trust. Are we going to rely on something larger than ourselves? We must use the gifts we have been given, but use them in the awareness of a much greater power at work.' This insight is based on his experience in Rwanda, where he also discovered that there are three types



of courage, physical, moral and psychological. It helps if we can articulate our life purpose and cultivate what the authors call a 'hard-coping' attitude. Another capacity is confronting with care or 'carefrontation', which requires for soft skills and is built on four concepts. Listening and building trust are key, as is caring as much about the other's goals as you do about your own. The chapter as a whole invites the reader to begin a process of transformation.

Much more could be said about each of these chapters, for instance the finding that listening activates the part of our brains hardwired for empathy; this relates to the research on mirror neurons reviewed above. The final chapter summarises the book's theme of doing good and living well, suggesting that we can all formulate a personal programme of daily giving, choosing a particular area to work on. I think a daily schedule would be a bit much, but a weekly commitment makes a lot of sense. I should also add that the chapter on humour is well worth reading. There are some very amusing quips by Ronald Reagan. He was accused by Walter Mondale of 'government by amnesia', to which he replied 'I thought that remark accusing me of having amnesia was uncalled for. I just wish I could remember who said it.' A very worthwhile book from both the scientific and personal point of view.

philosophy-religion

Not Good enough for God

Max Payne

THE NEW ATHEISTS

Tina Beattie

Darton Longman Todd, 2008, 209 pp., £8.95,p/b, ISBN 10 0 232 52712 1

GOD & THE NEW ATHEISM

John F. Haught

Westminster John Knox Press, 2008, 124 pp., \$16.95, p/b, ISBN-13 9788 0 664 23304

Richard Dawkins' *The God Delusion* is polemical, unfair, and lacks any deep understanding of what the deeper springs of religion are. It has provoked many defenders of Divine existence: some good, some not so good. Unfortunately these two books fall in

the latter category. Tina Beattie takes on a whole raft of modern atheists, but too often descends to Dawkins' level. Christopher Hitchens' views on the Iraq war do not necessarily invalidate his opinions on the existence of God. Polly Toynbee's foibles are not particularly relevant, nor are anecdotes about Dawkins' private conversations.

Beattie deconstructs modern science from a sociological/psychological perspective. The rise of modern Western science is seen as an essentially masculine and rational polarisation of thought that sees the feminine, the emotional, and the Church as the dark 'other'. Science therefore has to dominate and achieve victory over this 'other.' Later on she goes on to admit that things are more complex. The Catholic Church is not exactly a feminist organisation, and though she tries to explain Darwinian evolution in terms of an ideological plot to justify the superiority of men over women, and white races over coloured, she admits that is not all the story. This honesty does her credit, though it weakens the force of her argument. She declares that she is not a Post-Modernist regarding all ideologies as socially relative, but the lady doth protest too much. Any argument that declares that the Victorian conflict over evolution was part of a power struggle between rival male elites loses credibility for anything that follows. This is a pity since she is on to something important. Scientific objectivity is a highly sophisticated social construct as Michael Polanyi pointed out in *Personal Knowledge*, but it takes a more sophisticated analysis than this to work out the consequences.

Having asserted that religion points to something important which science ignores, the argument proceeds to examine the problem of evil. She concludes that the sheer magnitude of undeserved suffering cannot be squared with the concept of a personal designer God, but suggests that God as a creative artist somehow solves the problem. This does not seem any more convincing. An alternative is to say that the problem of suffering, like every other profound religious, philosophical or scientific problem: it simply cannot be solved from the limiting perspective of human experience.

Tina Beattie regards religion as a social phenomenon, and therefore has

little use for William James' '*Varieties of Religious Experience*'. In contrast, John Haught rests his case on the personal and inward dimension of religion. For him faith is not credulous belief, but a sense of something beyond space, time and matter which is of supreme importance. He reproves Dawkins for only examining the ideas of extreme fundamentalists, and ignoring theologians. This is a little unfair. Dawkins means by theology what theologians have traditionally meant by theology; arguments about transubstantiation, and the persons of the Trinity, and treats them with deserved contempt. What Haught means by theology is arguments by liberal theologians like himself who realise that traditional theology is bankrupt, but still think that they are talking about something important all the same.

Haught points out that Dawkins' scientism is as dogmatic as any religious creed, and that he is as intolerant of disagreement as any Cardinal Inquisitor. Scientific naturalism is an 'explanatory monism' which carried to its logical extreme eliminates all meaning, love, beauty of art, and moral purposes: all things that scientific naturalists value. Above all it eliminates science itself which is a creative product of the minds of scientists, and is systematically inexplicable by any system that reduces mind to the operations of matter. These arguments have been set out before, but they are worth repeating as often as possible, and Haught does it well.

However the book assumes that following the inward dimension of faith leads to the transcendent God of the Abrahamic religions, Judaism, Christianity and Islam. It stops there, and simply expands its conclusions. There is more to be said. An important question is to ask how the alternative religious traditions of the East fit in. Buddhism, sophisticated versions of Hinduism, and the Spiritual naturalism of Taoism, all refer to the dimension of experience Haught labels as 'faith', but they all give different world pictures. A personal God does not necessarily follow from intense inward experience. Above all, if this direction of faith is so important, how is it to be pursued? Within the Christian tradition the practice of gathered Quaker worship at one extreme, and the Catholic contemplative orders at the other, both point a way onward. The Eastern religions have complicated

systems of meditation and yoga. The question is ignored here, but surely an attempt to relate religion to science must face the issue of the techniques of enlightenment and their consequences.

Travelling through the Glass Darkly

David Lorimer

LIVING ON PURPOSE Graham Dunstan Martin (SMN)

Floris Books, 2008, 230 pp., £20,
p/b – ISBN 978 086315 632 8

Written in the same robust style as his earlier book *Does it Matter?*, *Living on Purpose* presents powerful arguments for reinstating meaning, intention and value, which had been evacuated by contemporary atheistic thinkers who deny their existence in Nature. This is a bleak view, articulated by Bertrand Russell over 100 years ago. Graham even invents a new term to describe such thinkers – Vimfortists, a word he derives from the Latin *vim* (by force) and *forte* (by chance). It is a colourful term, which would require promotion by the likes of Melvyn Bragg if it is to become common currency. These people are described as assassins of meaning, and they are skillfully undercut by Graham in his discussion of the self-refuting nature of reductionism, arguments that are also put forward by Mary Midgley. It is one thing to assert that Vimfortism cannot prove its case, and another to vindicate meaning and purpose, which Graham goes on to do.

He quotes John Searle as saying ‘consciousness is not just an important feature of reality. There is a sense in which it is *the* most important feature of reality because all other things had value, importance, merit, or worth only in relation to consciousness.’ One should note that consciousness includes both thinking and feeling, and it is a mistake to overvalue the first at the expense of the second. Graham appeals to a more intrinsic sense of right and wrong as a means of avoiding a wishy-washy relativism. For him, a basic element of morality is compassion, which corresponds to the infinite love and benevolence experienced by the mystics. He continues his discussion with an overview of the problem of evil, which takes a peculiar form in Western monotheism. He inclines towards a

process theology and an emergent God, a theme which reappears in his conclusion. He rightly observes that one cannot really conclude a discussion of the problem of evil, but only suggest ways of thinking about it in terms of necessary differentiation and subsequent unification after evil has been isolated and eliminated.

The next chapter discusses criteria for distinguishing true and false religions. As one who spent much of his life teaching French poetry, he notes that literalist and fundamentalist interpretations of religious texts actually rest upon a misunderstanding of the nature of language, which can often only be sensibly interpreted metaphorically. As he observes: ‘the truth is not in the doctrines, these are merely words, and words are not experience, but merely point to it.’ Nevertheless, he gives examples of ‘impossible religions’, initially disguising them as abstract entities. This clearly shows that one has to draw the line somewhere, both in terms of reason and on the grounds of morality and compassion. Such extremist views are argued to be inconsistent with the underlying nature of the universe and our transcendent experience of love and bliss.

The next few chapters venture onto the territory of near death experiences, reincarnation and survival. In each case, the evidence and arguments are reviewed in detail. Even those familiar with these fields will find the rigorous quality of the argument extremely useful in highlighting the key issues. Most Vimfortists know nothing about this literature, and if they do, attempted to approach it on *a priori* grounds. For example, Paul Edwards criticises Ian Stevenson’s work on the basis that the collateral assumptions involving reincarnation are impossible based on his tacit assumption that the mind is entirely dependent on the brain. It is not possible to understand Stevenson’s work properly from this viewpoint.

The last chapter is entitled Divine Incompletion. In common with William James, Graham believes that there is an irreducible mystery at the heart of human existence, which prevents us from achieving certainty through clear and unmistakable evidence in the parapsychological and spiritual field. He quotes Alan Watts as saying that God is the Self of the world and the reason you can’t see God is the same reason for which you can’t see your own eyes without a mirror — a

formulation very similar to that of Meister Eckhart – ‘the eye with which I see God is the same eye with which God sees in me.’ Although he does not use the phrase, Graham sees the world as a place of soul-making, where the separation entailed by individuality gives us the opportunity to learn the supreme lesson of love and compassion. This, however, is a gradual process, like everything else in the universe. Graham suggests that the divine is where there is no stopping place, representing ‘an ever expanding, ever deepening sense of life.’ This is an exhilarating prospect.

On the basis of the evidence and arguments reviewed, Graham expects to survive death. This is a more confident conclusion than CD Broad, who said that he would be more annoyed than surprised if he survived. Graham relishes the prospect of meeting - to their great astonishment - his new atheist opponents. This is a little similar to Swedenborg reporting theological discussions with Calvin and Luther, in which he claims that they had recanted on their views of the vicarious atonement. A really excellent and enjoyable book - highly recommended.

An Authority Check

Malcolm Hollick

THE ESSENCE OF REALITY: A Clear Awareness of How Life Works

Thomas Daniel Nehrer

O Books, Ropley, 2008, 265 pp.,
£11.99, p/b – ISBN 978-1-84694-083-5

I have very mixed feelings about *The Essence of Reality* by Thomas Daniel Nehrer. On the one hand I agree with much of what he says, with a few notable exceptions discussed below. On the other hand, I reacted strongly against what strikes me as his egotistical attitude.

Nehrer sets out to explain the nature of Reality and how to reach a clear awareness of it. His central thesis is that the Essence of Reality is consciousness, rather than matter. In other words, the material world arises from will and intention rather than being the stage upon which we act them out. Nehrer is on firm ground, I believe, when he claims that other people sense our inner qualities and how we feel about ourselves. Their responses to this intuitive

understanding can have a dramatic effect on our lives. However, he goes much further than this when he argues that we create our own reality, suggesting a few times that we have only ourselves to blame if our lives don't match our desires. His main focus here is on inner qualities, but he does occasionally slip very close to the New Age nonsense that we can all manifest a Rolls Royce and a mansion, perfect health and the ideal partner if we set about it the right way. He also comes close to blaming the victims of disease or bad luck.

Nehrer talks about how everything is connected and an expression of the One. But at the same time his approach is very individualistic. He argues that we can be masters of our own destiny by rejecting all authority, engaging in various personal development techniques, and having clear intentions. This seems to me to ignore the very essence of Oneness. In seeking to manifest the material reality of our desires, we are not acting alone, but co-creating the future with every other conscious being in the universe. The flow of Reality is therefore the synthesis of all these intentions, and cannot satisfy everyone's desires simultaneously unless they all happen to mesh perfectly. To me, the process of manifestation is one of aligning our desires, intentions and will with the cosmic pattern, or gaining a clear awareness of the flow of Reality as Nehrer might put it. Inevitably, our egos and human failings mean that at times we do not get what we want – particularly perhaps on the outer, material level. But we may get what we need, or at least what is necessary for the Whole.

So how do we reach this clear awareness? The first step, according to Nehrer, is to reject everything we've learned from our culture, and to take nothing on authority. Rather, we should use introspection to pull ourselves up by our own bootstraps. Having rejected classic meditation, a smorgasbord of healing methods, prayer, kinesiology and various other approaches, Nehrer recommends several tools to help with this process. These include meditation (in the form of quieting the mind, which he claims is not what classic meditation is about), self-hypnosis (for deep physical relaxation), ideomotor response (using a pendulum to gain information from the subconscious mind), automatic writing (to bring subconscious issues to the surface),

dream interpretation, and auto-suggestion (seemingly another word for affirmations).

The healing process Nehrer advocates is to pick a thought pattern or problem, regress back to its beginnings in some event early in life, and then change it through auto-suggestion. When reduced to its basics in this way, the process is similar to many therapies. The key difference is that Nehrer rejects any idea of help, seeing all interventions as involving issues of authority, power and control. He seems never to have experienced the power of a good therapist, counsellor or coach to facilitate self-discovery and personal freedom. And he seems not to realise our need of others as mirrors, or to challenge us with 'Hey, what about?'

The process also fails to address some big questions. First, is it actually possible to start with a clean slate, without taking anything on authority? I doubt it, and it is clear that Nehrer owes a large, unacknowledged debt to the world in which he grew up and the extensive reading he has obviously done – but deliberately not referenced. We all stand on the shoulders of giants, even if we question their conclusions. Second, can we really get to the bottom of our own nature and the essence of Reality through introspection alone? Again, I doubt it. Our psyches are extraordinarily skilled at concealing the truth about ourselves from even the most searching and persistent inquiry. And our deepest behaviour patterns are usually associated with experiences in early infancy, birth, or even in the womb, before we had conscious awareness. To get at these often requires powerful therapies such as Holotropic Breathwork or Peak States of Consciousness. Third, is the relationship between mind and emotions. Nehrer, in common with A Course in Miracles and many other approaches, lays responsibility for our problems at the feet of the mind. Change the mind and all else changes, including the emotions. From my perspective, and those of many therapies, however, the emotions are more fundamental. We need to start by healing emotional traumas and then mind healing can follow.

Finally, I want to return to the issue of what appears to me to be Nehrer's egotism. On several occasions he tells the reader not to treat him or his ideas as any kind of authority. And yet the whole tenor of the book sets him

up as just that. He starts out by arguing that 'you', his reader, have distorted views of Reality due to the beliefs and myths of your culture. He then sets himself above any such limitation, as the following two quotations illustrate. 'Having ... cleared away all the synthetic notions, beliefs and definitions absorbed during childhood, I only depict for you How Life Works when seen clearly.' (p.7) 'On my own and through my own specified, introspective cleansing, I came to see the flow and gist of life clearly. From a higher perspective, I am able to reflect meaningfully on great teachers of the past, able to discern distortion in the message ...' (p.176)

In my view, those with 'a clear awareness' don't need or want to promote themselves. Their messages speak for themselves. Thus Nehrer's attitude repels me and I am more critical of his larger message than I might otherwise be. Perhaps this is just my resistance to authority?

Malcolm Hollick is author of *The Science of Oneness: A worldview for the twenty-first century*.

Embodying Wisdom and Love

David Lorimer

THE RETURN OF THE PERENNIAL PHILOSOPHY

John Holman (SMN)

O Books, 2008, 170 pp., £10.99, p/b
– ISBN 978 1 905857 46 3

In the 1990s, the Network held regular meetings of the Science and Esoteric Knowledge Group, which eventually put together a Manifesto for the New Science of Consciousness, which was published in the Review. We were concerned with many of the issues raised in this book, particularly in relation to worldviews and the contrast between the approaches of analytical and mystical philosophy. The tools for the first are inadequate for the second, as John Holman points out. Engagement on the spiritual path requires a commitment not only of the mind but also of the being, and the mind has to operate at a higher, more unitive level, which may not even be regarded as valid by analytical philosophers. It is striking in this regard that so few British universities

offer courses on mysticism, while many more do so in theology and still more in philosophy.

John Holman aims to present a picture of the Western esoteric worldview, focusing on psychospiritual and cosmological aspects. Some readers would question whether the definite article can properly be used about this worldview, but each scholar will have to arrive at their own conclusion. Aldous Huxley has been much criticised for proposing a single understanding. However, the attempt to present such a picture is a noble undertaking and extremely helpful to the general reader, requiring as it does considerable background reading and the capacity to synthesise essential ideas. The book falls into three parts: a description of the perennial philosophy including Gnosticism, Neoplatonism, the Traditionalism of Guenon, Schuon and Coomarswamy, Theosophy, Kabbalism and Alchemy. The second part is concerned with the nature of the spiritual path in terms of a series of initiations. The third focuses more specifically on changing worldviews, including chapters on CG Jung, Assagioli and Ken Wilber.

The essence of Gnosis is self-knowledge, but not at a superficial level. Rather, it is the realisation expressed by Schuon that human consciousness is ultimately God's consciousness, and the path of wisdom or jnana is to become fully aware of this and to act from a universal rather than a narrowly personal understanding. As the early Gnostics realised, this is a minority occupation in any era, hence their distinction between those aiming for direct knowledge and the much larger

number of people who take this knowledge on trust as a matter of faith. Some helpful diagrams and tables are useful in orienting the reader.

Holman moves on to describe the stages of initiation as a deepening of spirituality, defining spiritual initiation as 'a breakthrough into a new awareness.' This entails an expansion of the mind, an intensification of the heart and strengthening of the will. The path is carefully mapped out according to a variety of sources, and the corresponding state of awareness is described. The initiate gradually experiences him or herself as a soul willing to be dualistic mystical state and eventually to the unitive mystical state. Peter Kingsley is quoted as observing that the journey eventually brings us back to exactly where we began, and that nothing new is found that wasn't already present all along. This kind of paradox characterises the whole process. The particularly comprehensive table on pages 83 and 84 is well worth studying.

René Guenon pithily observed that the modern mentality 'is no more than the product of a vast collective suggestion' a point which it is easy to forget. Not surprisingly, John advocates that we need to go beyond postmodern limitations, which treat mysticism as a form of Constructivism. The insights discussed here go beyond language and rational thought, rooted as they are in experience, which may include a sense of pure consciousness. The change in worldview will be from a matter-based universe towards one based in consciousness. Space does not allow more than an outline of the thinkers discussed in the third part, but I did find that the references to Ken Wilber did not include his latest thinking, in particular the importance of the four quadrants and his insistence that inner experience belongs in the upper left, while it is also important to acknowledge that the traditional understanding of the great chain of being has been dismantled by modern science and philosophy. Wilber defends it strictly within its own quadrant. There is also an unfortunate misprint which occurs in the first sentence in the book, which reads 'the principle aim of this book'... - this book reminded me of an advertisement for a lecture at St Andrews arranged by the philosophy department in which it was announced that 'The Principle will be in the chair.'

John Holman has performed a great service in bringing together an outline of the cosmology and spirituality of Western esotericism in an accessible form, so that readers can more deeply appreciate the challenges of the path, while realising that the esoteric perspective provides a non-reductionist worldview which is also compatible with science.

psychology- consciousness studies

The Power of Presence

David Lorimer

THE MANDALA OF BEING

Richard Moss, MD

New World Library, 2007, 360 pp.,
\$15.95, p/b - ISBN 1 57731 572 3

This extraordinary and profound book is the distillation of thirty years of teaching, research and self-enquiry, exposing our default psychological patterns that prevent us from experiencing what Moss calls 'radical aliveness', where we live more completely in the Now. The Mandala of the title is simple enough, with two main axes, Future>Past and Subject>Object (Me>You) and Now in the centre. However, it is a remarkable tool, as the book amply demonstrates. It not only provides a map of how we escape from the centre but provides us with guidelines about how to return there. In an era when so much of our personal and collective lives are dominated by fear, this book enables us not only to understand the nature of fear, but also to use the power of awareness and love to dissolve it.

The two main parts of the book explain the fundamental principles of awareness, the journey from self to Self, and utilising the power of awareness by working with the Mandala. The book positively bristles with insights, many expressed in felicitous aphorisms, the fruit of a distillation process whereby the essence of an insight is extracted and expressed. A very powerful tool used by the International Futures Forum is the love and fear loop diagram. Both of these patterns are self-reinforcing, and it is especially difficult to move from fear to love; rather, one seeks to



Winter Flower by Ann Brocklehurs

A Transpersonal Omission

David Fontana

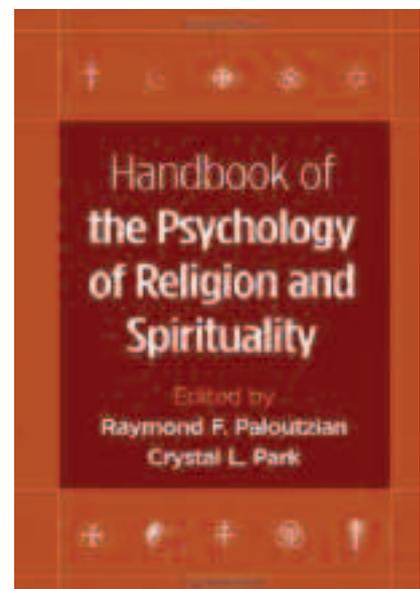
HANDBOOK OF THE PSYCHOLOGY OF RELIGION AND SPIRITUALITY

Edited by Raymond Paloutzian and Crystal Park

The Guilford Press, 2005, 590 pp., \$79, h/b. – ISBN 1 57230 922 9

I must admit to some bias here. I opened this book with a keen feeling of anticipation and excitement. An edited book of this length, devoted not just to the psychology of religion but also to the psychology of spirituality, seemed to me just the thing for which we have been waiting. I ended up feeling a little disappointed. But before giving my reasons let me look at the book's contents, which in spite of my reservations render it a very welcome addition to the bookshelves of all those with a special interest in the subject.

As the editors point out, despite the fact that 'religion is the greatest force for both good and evil in the history of the world' the psychology of religion was barely addressed by academic psychologists for much of the 20th Century. The subject got off to a good start in the early part of the Century, with important early studies by leading figures in the history of psychology such as William James and Stanley Hall (to say nothing of the interest shown in it by both Freud and Jung), then fell from favour. There were various reasons for this fall, though in my own view the drive by academic



control and manipulate. Moss suggests that we should recognise fear as the first teacher of the unawakened mind. Instead of facing fear with the power of awareness, we tend to use any means of escape to avoid experiencing it, and thus remain trapped. Religions reinforce the dichotomy with their respective gods of fear and love; and yet, as Moss both experiences and expresses, 'Love is the backbone of reality: it is the unbroken connectedness of all things, everything in relationship to everything else. Nothing is ever in exile from it; there is nothing in life that does not belong here, in reality. Even fear.'

Moss begins at the beginning, and often returns there. He describes how we begin to construct a false idealised self even in childhood as a defence against a pervasive feeling of inadequacy and insufficiency. Without developing the power of awareness, this sense remains with us and influences all our actions and relationships. If consciousness is intrinsically wholeness, then we can begin from wholeness rather than strive towards it. The ego or survival personality does not recognise this, since it is defined by separation and isolation, and its greatest fear is extinction or nonbeing, hence the root of the fear of death. Unless we experience this, we cannot express the fullness of our being. This involves living from the inside out, recognising that 'we are each here to pioneer a new possibility, to let our souls sing forth their own unique live songs, and not simply to become a family or culture tells us we should be.'

The process is one of moving from outer to inner identification, and realising that 'how we hold each moment in our awareness is how we are simultaneously held by that moment. This is the reciprocal, co-creative nature of the reality in which we live.' At our most profound, we can truly realise that our 'I' is Existence itself, and 'when our attention originates within the love that is intrinsic to us, and we reside at the beginning of ourselves, then the world is love. When we hold even the most painful places in ourselves with loving, open attention, we experience compassion... and our whole world transforms.' Moving on one stage further, we can even gain empathy for our own suffering, which then opens us into compassion for the suffering

of others. As Moss aphoristically puts it: 'because we become less afraid of our own humanity, we naturally become more human.' As we continue our journey and feel more sufficient as we are in the present moment, so 'we discover we already are that which we have been seeking.' Much of TS Eliot's poetry, quoted in this book, charts this process.

The second part of the book is more practical, explaining the Mandala in more detail and giving specific instructions and exercises to use it. The axes are explained in terms of a continuum of psychological time - past and future, and a continuum of relationship - subject and object. Each of these represents a position or perspective on life. Translating the insights of the first part into affirmations in the second, we arrive at 'I am sufficient as I am' and 'I am already that for which I have been seeking' as we rest in the Now. We can tell ourselves stories from each of the positions, but this means occupying the space which is not in the present, to which, however, we can readily return. We are reminded that the body is always in the present, even if the mind is elsewhere.

In the section addressing psychological time Moss identifies nostalgia, guilt and blame in the past, while uncertainty, fear and hope are in the future. He points out that hope also draws us away from the Now, and characterises it as a weak counterfeit for real trust and fullness; this can come as quite a surprise as we tend to identify hope as a positive attitude. However, Moss takes the view that facing life's ferocious moments does not take hope, but rather courage, determination and self surrender. He adds 'to live each moment with trust, no matter what happens, gives me the deepest meaning and opportunity of my life.' Life calls us to know ourselves, which is simultaneously a call to deeper caring and compassion, for 'Love is the very soul of life.' As Mother Teresa said, we cannot all do great things, but we can do small things with great love. We can allow the love which is at the centre of ourselves to radiate outwards, but this is only possible if we remain in the Now and connected with the Source. We can fall away at any moment, but we also have the capacity to return. The power of awareness is always with us, and this seminal work serves as a reminder of who we really are.

psychology to become a science based on the models developed by physics and biology was one of the most important. Psychologists proved themselves all too ready to dismiss religion as mere superstition, readily explicable in terms of wishful and magical thinking, father fixation, early conditioning and the like, and until relatively recent times a specialist interest in the subject was unlikely to help any young psychologists move up the career ladder. However, religion has continued to play a major role both in social and individual psychology and in human thinking, motivation and behaviour, and in influencing values and ethics and (sadly) in fermenting discord between cultures and nations. Belatedly but inevitably, psychology has had to begin the task of integrating it into the academic mainstream of the discipline.

The present text leaves the reader in no doubt of the quality and extent of the research now being conducted in university psychology departments as a result of this upsurge of interest. The blurb rightly tells us the book is written by 'foremost authorities' and 'grounded in the latest empirical research', and that in consequence it offers us 'state-of-the-science perspectives on the psychological processes underlying spirituality, religious behaviour and religious experience', and to this end the book is divided into five parts namely *Foundations of the Psychology of Religion; Religion Through the Developmental Lens; Religion and Basic Psychology Subdisciplines; The Construction and Expression of Religion;* and finally the *'Psychology of Religion and Applied Areas*. The five parts include authoritative chapters on such topics as *Research Methods in the Psychology of Religion, The Neuropsychology of Religious and Spiritual Experience, Emotion and Religion; Religious Conversion and Spiritual Transformation; Religious Practice Ritual and Prayer;* and *The Psychology of Religion in Clinical and Counseling Psychology*. Every chapter is well supported by appropriate references, and provides a good and

sometimes very good introduction to the material concerned.

It seems somewhat ungracious to express reservations over a book of this extent and this quality, but my own slight disappointment is born of the fact that the range of the book is somewhat limited. Every editor has his or her ideas on what to include in an edited text, and disagreement over the details of editorial decisions is inevitable, but any book entitled a 'Handbook', does lead one to expect a fully comprehensive coverage, and this expectation is perhaps not fully realised in the present instance. The editors in their introductory chapter describe the book as presenting a 'modern five-theme conceptual model for organizing the ... rich and complex knowledge that the psychology of religion now comprises', and this description is fully justified, but to me an obvious omission is the inclusion of a sixth stream composed of less easily defined but nevertheless vital areas of the subject. Transpersonal Psychology, which of all areas of modern psychology is one of those most closely associated with the psychology of spirituality, is one example of what might be included in this stream. Other examples are mystical experience (to which the book makes little reference), and the personal accounts of religious and spiritual experiences collected and published by the Religious Experience Research Unit under any of its various titles. To these examples we can add the link between creative expression and religious experience, the role of spiritual practices such as meditation and prayer, the religious experiences associated with Near Death Experiences (NDEs) and with those paranormal religious experiences that have significant and lasting effects upon the psychology of those who encounter them. A final example is Eastern psycho-spiritual traditions which are virtually ignored in the book except for brief references to Buddhism.

In fairness the editors make clear that they are addressing the scientific psychology of religion, and they may justifiably argue that the above themes have generated less scientific

research than the areas they have chosen to include, and thus that they are less likely to be included in university programmes on the psychology of religion. Nevertheless, from a psychological perspective, the profound effects that the experiences associated with these themes can sometimes have demand that they be examined and their significance explored. The impression given throughout the book is that religion and spirituality are of interest rather less in terms of lived psychological experience than in terms of quantifiable (and primarily social) psychological data.

As a European I am also bound to draw attention to the virtual neglect of the European contribution to the psychology of religion and spirituality. Of the 45 contributors to the book all are from North America save for Jacob Belzen and Josef Corveleyn from the Netherlands and Patrick Luyten from Belgium, and the impression is thus given that little of any note has taken place in the subject on this side of the Atlantic. This is not to minimise the work currently being done in North American universities, which certainly exceeds current European efforts, but scholarship is international and some attempt to show the similarities and differences between American and European approaches would have been welcome to European readers.

In spite of these quibbles this book is an indispensable contribution to the psychology of religion and spirituality, and one that I am privileged to have on my bookshelves. I wish it conveyed rather more of the excitement that for me at least characterises the psychology of religion and spirituality and that helps draw students to the subject, but the editors are to be warmly congratulated on giving us such an informative, illuminating and valuable book.

David Fontana is Visiting Professor in *Transpersonal Psychology* at Liverpool John Moores University. Among his recent books is ***The Psychology of Religion and Spirituality***.

DO YOU HAVE ANY PHOTOGRAPHS OF A NETWORK GROUP, WORKSHOP OR CONFERENCE?

If so, please send them to Olly Robinson at olly@scimednet.org for publication in the Network Review

Neuropsychology - the new approach to psychotherapy

Gunnel Minett

COMING INTO MIND - THE MIND-BRAIN RELATIONSHIP: a Jungian clinical perspective,

Margaret Wilkinson

Routledge, 2006, 217 pp., £20.89, ISBN 978-1-58391-1

THE 10 BEST-EVER ANXIETY MANAGEMENT TECHNIQUES

Margaret Wehrenberg

W.W.Norton, 2008, 232 pp., £10.99, ISBN 9 780393 705560

BEING A BRAIN-WISE THERAPIST, a practical guide to Interpersonal Neurobiology

Bonnie Badenoch

W.W.Norton, 2008, 348 pp., illustrated, £18.99, ISBN 9 780393 705546

WISDOM OF THE PSYCHE, Depth Psychology after Neuroscience

Ginette Paris

Routledge, 2007, 240 pp., £13.89, ISBN 978-0-415-43777-8

The new understanding of the brain provided by neuroscience is now spreading rapidly throughout psychotherapy in all its forms. These four books are only a tiny selection of the very wide range of new books in this area. Regardless of previous theories in psychotherapy, neuroscience is having a significant impact across the full range of psychotherapeutic forms.

Margaret Wilkinson is a Jungian analyst and Assistant Editor of the *Journal of Analytical Psychology*. In the book *Coming into Mind*, she draws parallels between contemporary neuroscience and Jung's theories. She emphasises the fact that, although intuitive, much of Jung's knowledge has now been confirmed by neuroscience.

Margaret Wehrenberg is a licensed psychologist and author of 'The Anxious Brain', In *The 10 Best-Ever Anxiety Management Techniques*, she starts by presenting an overview of the brain and explains the processes and chemical imbalances that lead to

anxiety. Understanding the biology of the anxious brain, she argues, will help those who suffer from excessive anxiety to distance themselves from their problem and thereby become more able to handle their panic and anxiety attacks.

In her biology-based approach she also explains the various forms of anxiety and panic, their various origins and how to best design an individual help programme. She suggests that some forms may be best treated with drugs, at least initially, and/or in combination with mind-techniques aimed at decreasing the anxiety levels and 'retraining' the brain to produce milder reactions. She also differentiates between anxiety caused by 'incorrect' brain functions and reactions due to previous trauma. The latter, she argues, may require psychotherapy, whereas panic and excessive anxiety may benefit more from a direct retraining approach.

Bonnie Badenoch is a marriage and family therapist and President of the Global Association for Interpersonal Neurobiology Studies and Executive Director of the Center for Hope and Healing. In her work she uses two approaches which, she argues, work very well together. She uses a model of how the brain works as well as sand-play in her therapy.

The neurobiological explanation of the brain corresponds well with diagnostic categories in psychotherapy. She has found that explaining how the brain works at an early stage of the therapy tends to have a very positive effect on the healing process. By using the hands as a model of the brain to explain which parts are involved in creating behaviour and mind states and how the different parts work

together, the patient can get a different perspective on their problems. Throughout the therapy the patient is encouraged to return to the brain model to get a different perspective on the processes that are involved in creating the various mind-states.

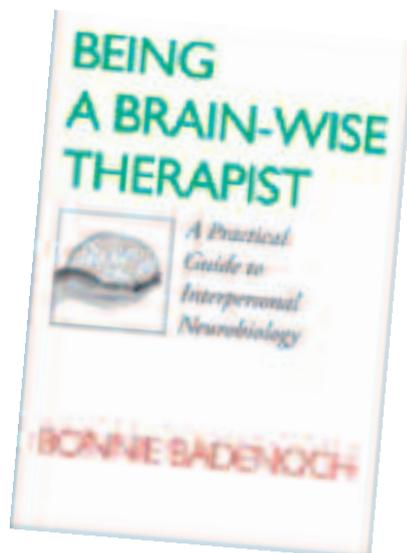
In the sand-play the patient is provided with a large number of figures which they are encouraged to place in a tray filled with sand. The purpose can be to illustrate a certain situation or feeling. Once the scene is set in the sand, it provides an opportunity for both patient and therapist to go through the interpretation of the various figures and their respective places in the tray. With the sand-play as a completely contrasting feature to the brain theory, the two approaches have been shown to have a very healing effect.

Ginette Paris is a psychologist, therapist and writer. She teaches Archetypal and Depth Psychology at Pacifica Graduate Institute in California and a member of the Board of Directors of the Foundation of Mythological Studies.

In *Wisdom of the Psyche* she presents an overview of depth psychology. She starts with a personal story of how she had a life-threatening accident and says that not until she was facing the very clear risk of having reached the end of her life did she get the deeper wisdom needed to be a good therapist.

From there she moves on to discussion various aspects of therapy; as a medical cure, an economic investment (in improved health) but also therapy as redemption. She presents an interesting overview of the main dilemmas of contemporary psychology and psychotherapy of how to integrate knowledge acquired by neuroscience and medicine and apply it to a healing model that incorporates imagination and a wider view on life as a whole.

Partly due to the health insurance system in America, a model of psychological health has emerged. It assumes that psychological health can be measured in a similar way to physical health. But, she points out, there is a great difference between knowing how a broken limb should be fixed (based on knowing how a healthy limb should look) and what a psychologically healthy person should look like. We are all products and part of our individual circumstances and assuming that there ever can be a standard that fits all is far from realistic.



All four books represent a very exciting new phase of psychotherapy. Understanding how the brain works provides added strength to psychotherapy. Not to mention the preventative work that can be done for future generations. Understanding how problems occur offers a whole new range of possibilities to prevent future generations from getting the same bad treatment which is causing such problems in today's societies.

Given that our psychological (and sometimes even physical) health is a direct effect of the combination of nature and nurture, increased knowledge in this area can have a direct effect on our wellbeing in the future. The problem still remaining is to bring theory into practice. Here a number of additional aspects come into play. Financial resources will be required in order to transfer these theories into practical policies in the various aspects of childcare. And as Ginette Paris points out, there are also social and religious aspects as to how best to bring up children. Regardless of convincing new theories parents still tend to prefer an intuitive approach to parenting and are often unwilling to move away from their 'rights' as parents to determine their children's upbringing.

Hopefully, the rapidly growing field of neuropsychology will be able to provide sufficient evidence for a better understanding of human needs and how to avoid psychological problems. These four books certainly do their bit to contribute in a very positive way to this accumulation of effective knowledge.

*Gunnel Minett is author of **Breath and Spirit** and **Exhale**.*

Tailor-making psychotherapy

Gunnel Minett

THE NEUROSCIENCE OF PSYCHOLOGICAL THERAPIES

Rowland W. Folensbee

Cambridge University Press, 2007, 223 pp., £21.99, p/b - ISBN 978 0521 681 889 (paperback), 978 0 521 863 179 (hardback)

The new advances in neuroscience are making it possible to tailor-make psychotherapy on a completely new scale. The increased knowledge of how the brain works has made it possible to map the brain activities in more and more detail.

This knowledge is something that is being picked up by psychotherapists. By adding brain scan to the diagnostic tools, the psychotherapist can detect problem areas in the brain that may match the conclusions drawn from conventional interview techniques.

This does not just help the therapist to make the correct diagnosis. Explaining what takes place in the brain to the client has shown to have a positive effect on the therapeutic process, often by removing any stigma around the psychological illness. Detected problem areas can also act as a starting point to explore how and why this may have occurred. And it helps the therapist to design suitable therapy for the client, both when this involves medical or other treatment.

Rowland W Folensbee is a Clinical Associate Professor from Texas with a private practice in psychology. His practice includes behavioural, cognitive behavioural and psychodynamic approaches. For the last 20 years he has been working on integrating neuropsychology and neuroscience into his clinical assessment and intervention. The book is written both for professional and lay persons.

Death's Lessons for Life

Penny Sartori

PRACTISING CONSCIOUS LIVING AND DYING

Annamaria Hemmingway

O Books, 2008, 218 pp., £11.99, p/b - ISBN 978 1 84694 077 4

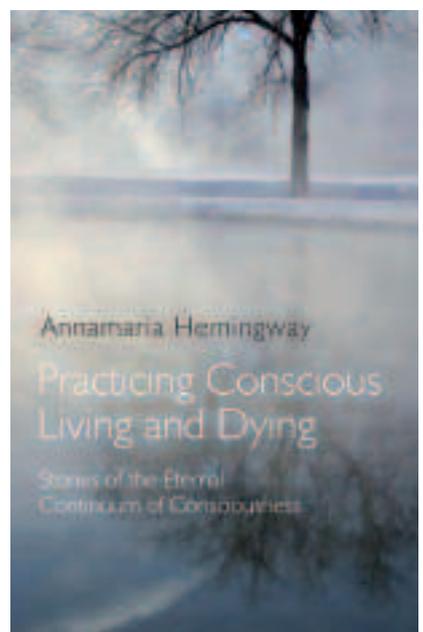
This is a wonderful book packed with insights and wisdom gained by people during times of suffering and heartache. Inspired by the illness and eventual death of the author's mother, the book describes the stories of nineteen people whose lives changed as a result of great loss or suffering. Interspersed between the stories are relevant reviews of the existing literature on death and consciousness.

Each story brings hope and comfort and highlights that certain experiences happen which simply cannot be explained or explained away. Some of the stories showed a positive turn around in the way the person lived their life as a result of having had a near-death experience resulting in helping others and even becoming healers and great teachers. Joanne's story in particular demonstrates that even after the heart wrenching loss of giving birth to her stillborn daughter

Cheyenne, great things were achieved which serve as a reminder of her life, no matter how brief. Even with the pointless, unnecessary loss through war, Sally's story describes how a school was reconstructed in war torn Afghanistan in memory of her son Peter who lost his life on the second plane which crashed in to the twin towers on 9/11. These powerful stories act as beacons of light and lead the way for a positive future.

Following his near-death experience Reuben came to realise that (pp.26) 'We all get attached to our physical bodies, but it isn't the deepest truth of who we are. People don't enjoy life because they worry all the time – about material possessions, about the future, about something they want or don't want. It's a funny thing: we strive for perfection in our lives, but we don't realise that perfection already exists, and that we don't have to go searching for it. The secret lies in reversing our usual order of business that is always striving to become something more; instead, we can try to experiment with becoming less and less, until we are nothing at all. Then we will discover an amazing truth: in reality, we are everything.'

It would be useful to add this uplifting book to the reading lists of all health care based university courses as well as it being placed in hospices throughout the world. These stories, including the author's own, will inspire and guide those faced with death gently into their transition. Paradoxically a book about death can be the best medicine to offer someone who is experiencing the loss of a loved one or faced with their own impending



death. A must read for everyone as death, one day, will be there to greet us all.

Dr Penny Sartori works as a nurse in ITU, Morriston Hospital and was awarded a PhD for her clinical research into NDEs. She is author of
The Near-Death Experiences of Hospitalized Intensive Care Patients: A Five Year Clinical Study.

ecology

A Psychohistory of Modernity

David Lorimer

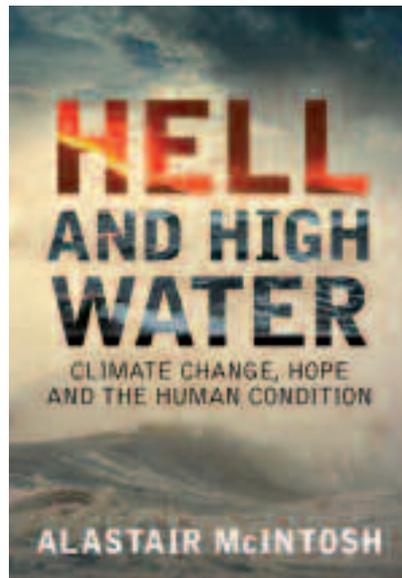
HELL AND HIGH WATER

Alastair McIntosh

Birlinn, 2008, 209 pp., £8.99, p/b – ISBN 978 1 84158 622 9

Subtitled 'climate change, hope and the human condition', this is much more than another despairing analysis of the human response to climate change, looking deeper to underlying causes and the complex ways in which we avoid facing the enormity of our predicament. Alistair McIntosh is visiting professor of human ecology and the University of Strathclyde and is also a campaigner for social justice and land reform. He grew up on Lewis, with its connections to folklore and a wider view of the nature of reality that gave him an insight into our underlying connectedness as humans. The two parts of the book reflect the subtitle, with one on climate change and the other on the human condition.

No one familiar with the field and the current state of science will find anything surprising about the first part, although it is written primarily with the impact on Scotland in mind. One focus is the eccentric programme on Channel 4 claiming that the whole business was a hoax perpetrated on an unsuspecting public. Alistair dissects the producer's motivation and distortions but shows that the programme did strike a chord among those who would prefer to believe in business as usual. Our dilemma is that industrial lifestyles are destabilising the planet but we still expect rising prosperity within a context of a limited carrying capacity. Public ambivalence does not empower our politicians to take decisive pre-emptive action, so we agree that something must be done while



continuing our present habits: 'in a democracy we only get the politics that reflects who we are'. Alistair does not think that green capitalism is the answer because, as he demonstrates in Part 2, growth depends on continuing creation of artificial wants and new markets. In addition, the scale and pace of the problem does not correspond to our wiring to react to immediate crises.

The second part of the book gives it real originality. Here Alistair analyses the human condition, relating inner to outer and social to ecological dimensions in a systemic fashion. Hubris tends to drive us to over-reach, and ecological devastation has been responsible for the collapse of previous societies on a smaller scale, as Jared Diamond has shown. This time, however, we are talking about the planet as a whole. Associated with this hubris is a level of violence and predation, which Alistair argues leads to a hollowing out of the soul, a loss of inner substance; and it is precisely this inner substance that can make the difference between collapse and breakthrough to a new level. Consumerism has also played an important part in colonising our identity and diverting the heart's longing from the genuinely liminal to the artificially liminoid. The real process is one of mystical death as we transcend our separate egos into a larger sense of Self that is one with the flow of life itself and is informed by the underpinning love experienced by mystics the world over. Here we need to recover our lost feeling intelligence prefigured in the writings of Adam Smith and Francis Hutcheson in the Scottish Enlightenment.

The most searing personal episode in the book narrates the loss of the Alistair and Verene's son, stillborn on New Year's Day 2007: the tragic meeting point of birth and death. In the 1980s, Kenneth Ring and others speculated on the possibility that the planet herself would undergo a near-death experience, which itself represents an initiatory process of death and rebirth. One of the outcomes of the process at an individual level is what he calls a 'spirituality of interconnection' which is a basis for hope rather than optimism.

In the current situation optimism may be said to resemble wishful thinking while hope is an attitude that enables one to take a positive view and act accordingly. To this end, Alistair proposes, reflecting AA, a twelve-step programme including such measures as rekindling the inner life, cultivating psychospiritual literacy, expanding our consciousness, developing non-violent forms of security and regenerating community of place. As can be seen, these proposals address a number of levels, which is surely necessary in addressing the complexities of climate change. As Woody Allen quipped: 'we have found the enemy and it is us'. We cannot address the outer issues without also addressing ourselves, which is precisely the hardest thing to do. This penetrating book will give readers the courage to ask uncomfortable questions and recognise that we ourselves are part of the problem and must become part of the solution if there is to be one.

general

Was it Something we Said?

Martin Lockley

THE UNFOLDING OF LANGUAGE: AN EVOLUTIONARY TOUR OF MANKIND'S GREATEST INVENTION

Guy Deutscher

Metropolitan Books, Henry Holt and Co, New York 2005, 358 pp \$26.00, h/b - ISBN 0 8050 7907 6

'Language is mankind's greatest invention - except, of course, that it was not invented.' If this is true, as Guy Deutscher asserts on good authority, then spontaneous generation of language - the trait that makes us

human - is just as mysterious as the origin of the species some 50-75,000 years ago. Although speculation about the linguistic ability of pre-Homo sapiens ancestors may seem like pure conjecture, given the lack of written hard copy before 3000 B.C., Deutscher convincingly unveils some of 'language's secrets' and dismantles 'the paradox of the great uninvented invention.' Success in this quest relies on linguistic understanding of the inherent structure of language which in turn arises from the perennial human inclination to impose order on speech for the purposes of convenience, clarity and emphasis. Such language-creating modes of expression arise repeatedly and with lawful regularity in almost all languages. Hence linguistics has its own scientific norms, laws and triumphs ranging from Williams Jones' demonstration of the relationship between Sanskrit, Greek and Latin, to Ferdinand Saussure's revolutionary theory of 1878 (which held that all vowels diversified from a single 'e' in ancestor languages), to Grimm's Law (recognizing the weakening of $k > ch > h$ in proto-German, around 500 B. C.), on down to the Great English Vowel Shift of the 15th century. Explaining such linguistic intricacies can be heavy going, but Deutscher mostly maintains a pleasing, light touch.

In the 1850s August Schleicher proposed that languages 'are natural organisms which emerged independently of man's will' thus manifesting a cycle of growth and decay. This view reflected the prevailing, perennially recurring, but flawed, notion that languages have only devolved since 'a Golden age of Perfection.' (This leads one generation to lament the decadent speech of the next with such sentiments as I once heard, most ironically, from an uneducated cockney on a day trip to Calais. This gal complained of the local gendarme ' 'e don't speak English proper like what we do.')

Languages are indeed living natural organisms, as Schleicher proposed, but they also, as Deutscher shows, construct and deconstruct themselves constantly. (It seems to me that linguistic evolution and devolution strike an almost perfect compensatory balance as they do in the homeostatic maintenance of the physiological body). For example, following Goethe's dictum (also not mentioned by Deutscher) that 'all is metaphor' we see how simple metaphors, especially those having to do with time and space (especially the

orientation of the body), and essential functions like eating, get adopted, diluted and abbreviated by use to the point where they need rejuvenation through added emphasis. So phrases like 'up above' evolved from Old English *ufan* (meaning 'up on') to *be ufan* (meaning 'by up on'), to *an bufan* (on by on top) through additional steps to *above*. Thus, 'up above' now translates as 'up on by on up.' Such a linguistic history of expansion and contraction (the latter a common linguistic term) allows us to recognize that *aujourd'hui* means 'on the day of this day,' or in case you're not really sure it means today, *au jour d'aujourd'hui* gives the added emphasis of 'on the day of on the day of this day'!!

Although Deutscher does not examine the work of Barfield or Steiner on the relationship between the evolution of language and the evolution of consciousness, I found many parallel observations. Like Barfield, Deutscher notes that words can completely reverse their meaning: e.g., in the 17th century 'to resent' could either mean to resent or 'to appreciate.' Recently 'wicked' has evolved two quite opposite meanings. On a more fundamental level, I was absolutely fascinated to read that 'to think is to forget a difference.' In other words thought interferes with memory (or our ability to remember everything) by conceptualizing every 'different' thing into more generalized categories. I believe Steiner said something similar when he suggested that as long as humans had 'clairvoyant perception of the past, *the need for written records did not exist*' (original italics in Sheppard 1983). So perhaps we began to write things down (order our thoughts) when our subconscious memories began to fail (and, presumably, when we began to recognize our thoughts and conscious memories as our own). Paradoxically, if I interpret this correctly, this is when self-conscious awareness began to impinge on the instinctual sub- or unconscious: or as Barfield put it when thought (conception) began separating from perception.

Deutscher shows us other linguistic ordering principles such as the 'me first' priority. We tend to describe ourselves first, then others, then animate and inanimate objects (Me Tarzan, you Jane, see animal, by rock). Caesar's principle *vini, vidi, vici* also orders sequences of events in time (though linguists joke that *vidi, vici, vini* describes another type of

conquest)! Both examples are intelligible speech, but much simplified, because only 'thing words' and 'action words' are used. Next come prepositions, like 'this' and 'that,' which evolved into pronouns. *Ille* (Latin for that) more or less evolved to become *il* (him) and *le* (the) in French (which just proves that two words can be better than one)! Next consider 'property words' like red or green which derive from thing words (blood and grow respectively) and then become appendages to thing words. But as Deutscher points out thing, action and property words are not synonymous with nouns, verbs and adjectives respectively. The latter are mere syntactic categories. With time, terms (nouns) emerged for abstract concepts (like concept or abstraction) which are not physical things at all. 'Ultimately the distinction between things and actions goes much deeper than language.' (Here I would develop the evolution-of-consciousness implications to infer, following Cassirer (1946), that 'language could not begin with any phase of 'noun concepts' or 'verb concepts' but is the very agency that produces the distinction between these forms, that introduces the great spiritual 'crisis' in which the permanent is opposed to the transient, and Being is made the contrary of Becoming.)

So Deutscher concludes as he began. Language 'must somehow have arisen of its own accord.' Its origins, which make us human, remain a mystery with hidden roots, but living branches. What we do know, however, is that we are currently losing and average of one language every two weeks, with small preliterate cultures being most susceptible. Alas, at least half the 6000 extant languages may disappear by the end of the century. But even this loss of diversity may be a natural side effect of the pressure for integration and unification that comes from increased contact between cultures and the stabilizing longevity-effect of literacy on dominant languages.

Clearly, like cultural change, linguistic evolution is highly dynamic. The implications for the evolution of consciousness are intriguing, and even though Deutscher does not say so explicitly, linguists can and do make very valuable contributions in this area. Although we take our language for granted, it not only reflects our consciousness more than we know, it also allows us to track the

history of our conceptual thought and perception. So, we may well wonder: 'Is it something we said?'

Cassirer, E. 1946. *Language and Myth*. Harper Brothers, New York
Shepard, A P. 1983. *Scientist of the Invisible: Rudolf D Steiner*. Inner Traditions International, Rochester, Vermont.

Msg Snt

David Lorimer

TXTNG – THE GR8 DB8

David Crystal

Oxford UP 2008, 239 pp., £9.99, h/b
– ISBN 978 0 19 954490

The relationship between texting and the development of the English language is a controversial one: we read on the back of this book that 'texting is doing to our language what Genghis Khan did to his neighbours 800 years ago', an assessment frequently aired in the popular press. However, as renowned linguist David Crystal argues, this impression is in fact misleading. At the outset, Crystal writes that 'all the popular beliefs about texting are wrong, or least debatable.' For instance, its graphic distinctiveness is not a totally new phenomenon in a world where abbreviations have been around for many centuries. Moreover, contrary to popular opinion, there is evidence that texting helps rather than hinders literacy. Teenagers are well aware of the differences in register, and use texting as a very specific form of communication. Even among adults in Britain, the prevalence of texting has increased dramatically. In 2006, OFCOM found that the average adult made 20 phone calls a week, and sent 28 texts.

Various chapters cover the distinctiveness of texting, reasons for using the service, subjects addressed and a comparative analysis of how other languages use texting. At the end there is an extensive glossary of common abbreviations in a number of languages, including Spanish, Dutch and Welsh. There are now international competitions for poems in txt as well as for speed of operation - one entrant apparently sends an average of 8,000 texts a month, which makes one wonder what else they have time for. Among the illustrations is a version of the national anthem, the Lord's prayer (dad@hvn) and even the 10 Commandments (u shall luv ur mobil

fone with all ur hart). It can readily be seen that texting is in fact another variety of language that has arisen in response to the development of new technology. Most teenagers would be appalled at the thought of using this language register in public exams.

The reader unversed in this language will learn a great deal from this book. Many abbreviations have become standard, such as OMG (oh my god!), CWOT (complete waste of time), CMB (call me back), and it is interesting to find quoted from Eric Partridge's 1942 dictionary of abbreviations mtg (meeting), gd (good) dfclt, while abbreviations such as wd, cd and fwd can be found in Victorian letters. The structure of teenage social life is mediated through mobile phones, which has both advantages and disadvantages. For instance, those close to each other will expect a good night text, but unpleasant messages can be equally be sent, which will surely rankle in the receiver's consciousness. This excellent book will hopefully reach a number of different audiences: young people will learn of the context of the technology and its use in other countries, parents will by and large be reassured by its findings, while those interested in language and its evolution will find many nuggets and new insights - text abbreviations in 11 languages are worth the price of the book alone.

The Politics of Libertarian Paternalism

David Lorimer

NUDGE

Richard H. Thaler and Cass R. Sunstein

Yale, 2008, 293 pp., \$26, h/b – ISBN 978 0 300 12223 7

Described in the latest issue of Prospect as '2008's noisiest ideas book', *Nudge* is an important and timely book as governments struggle to reconcile liberalism and paternalism, freedom of choice and the nanny-state. Hence the title of my review - libertarian paternalism, which might seem an oxymoron at first sight. The subtitle of the book informs us that it is about improving decisions on health, wealth and happiness. The problem, according to the authors, is that we often make poor choices, susceptible as we are to various biases, not to mention the weight of inertia.

Early in the book, we are introduced to the notion of choice architecture, using a very practical example of how the way in which foods are arranged for display influences the choices made by schoolchildren. They can be 'nudged' towards a healthier choice. Libertarian paternalism draws on, respectively, the insistence that people should be free to do what they like, and the legitimacy of choice architects trying to influence people's behaviour in order to make their lives longer, healthier and better. Nudge does not represent coercion, and is defined as 'any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives.' For interventions to count as nudges, they must be easy and yet keep to avoid.

Readers who have studied economics will remember the rational consumer who always makes rational choices, called here an 'Econ' as a reminder that real human beings are not in fact exclusively rational Econs, who react to incentives in order to maximise their satisfaction. The authors point out at the outset that we falsely assume that most people make choices that are in their best interest or better than choices made by someone else; this assertion is disproved by empirical research. Nor is it possible to avoid influencing people's choices, since choices are always set up in a particular way. The ideal, therefore, becomes to set up good choice architecture options, which make life as easy as possible. Hence the authors advocate better governance rather than bigger government, all of which makes a great deal of sense.

Our rationality is compromised by the fact that we think in two systems, one reflective and the other automatic, each of which has its appropriate sphere of action. However, they can get mixed up so that we are operating in the wrong mode. It is instructive to consider the role of inertia, especially in relation to financial decisions. We tend to remain with our existing arrangements, rather than question them and go to the trouble of changing them. For instance, given the recent debacle in the banking system, one might think of switching to Triodos, who operate on an ethical basis and did not overreach themselves. I even experience reluctance to change my telephone provider if offered a better deal. Conformity is another form of

inertia - we are easily nudged by others, a fact not lost on advertisers.

The authors outline six principles of good choice architecture: incentives, understanding mappings, defaults, feedback, expectation of error, and structuring complex choices. They then apply these, with examples, to money, especially investment, health and freedom to choose, for instance schools. It is a commonplace that we do not save enough for retirement, even if we know we should, which sets up a good case for a nudge. A key point is to make choices clear and straightforward, and not to overburden people with too much information. The result can be that people give up and therefore do not receive money to which they might be entitled. In this respect, Sweden is held up as a good example, but the US prescription scheme gave people too much choice. The lesson is that the more choices we give people, the more help they will need.

One specific useful suggestion is RECAP - record, evaluate and compare alternative prices. The system can also be used to provide a printout of total expenditure on a particular item in the course of the year. Most of us simply do not add this up, and if we did, we might change our behaviour. A further interesting and topical issue discussed in some detail is how to increase organ donations. Clearly, a system of presumed consent will far exceed the numbers of an explicit consent system. Interestingly, some online research showed that only 42% opted in as an organ donor, but when people had to opt out, 82% agreed to be donors.

The book ends with a dozen suggestions for mininudges and addresses some possible misgivings. They argue, convincingly in my view, against the slippery slope argument, partly on the basis that choice architecture inevitably entails some kind of nudge. They finish by observing that the sheer complexity of modern life and the rapid pace of change militate against both rigid authoritarianism and what they call dogmatic laissez-faire; hence the underlying case for libertarian paternalism. This will surely be a topic of much political argument, but I do find the concept of choice architecture extremely useful.

Is Utopia Possible?

Gunnel Minnett

DAMANHUR, THE STORY OF THE EXTRAORDINARY ITALIAN ARTISTIC AND SPIRITUAL COMMUNITY

Jeff Merrifield

Hanford Mead Publishers Inc, Santa Cruz CA, USA www.hanfordmead.com
2006, 349 pp., \$23.95 -
ISBN 1-59275-010-9

Around 30 years ago a group of people got together in the Italian Alps and started digging deep into the mountainside to build an underground temple. For obvious reasons perhaps, this kind of building was not included in the Italian building regulations. This meant that the group could not get planning permission for their work. To get around this the temple was built in secret.

The result is an extraordinary work of art with a number of underground chambers, beautifully decorated and unique in style. Another result of this remarkable achievement was the formation of a commune, an eco-society based on ethical and spiritual values, called the Federation of Damanhur. As the name implies, the commune is operated as a mini-state (currently with around 600 residents plus 400 close supporters), complete with its own belief system, language and even currency.

The commune, that has won an award for sustainability from the UN, has been very successful in many of its enterprises and is today regarded as a very interesting example of how it is possible to create a successful way of life with small means. The founder and major driving force behind this project is Oberto Airaudi (also known as Falco - all residents take on new names from animals and plants to mark their life-change). Oberto/Falco is a self-taught guru who started attracting followers at the tender age of 14, when he vowed to himself to invent one thing and read one book every day (which he has kept up quite successfully). He has also found time to write and has to date written around 300 books.

In this book we are given an in-depth account of how the temples were built as well as the philosophical cornerstones that form the foundation for Damanhur. The temples in fact being so important that they are regarded as part of these cornerstones. The style of the book is very similar to a travel guide where everything is

described in a totally positive way (the only real criticism is directed to the world 'outside').

Disregarding the biased approach in the book, it soon becomes obvious that this is a successful commune that seems to have succeeded where many other groups have failed. Which of course opens up questions of how and why they have managed this.

For an outsider the most obvious conclusion is that their shared belief system plays an essential role. Still, as the author states repeatedly, 'Damanhur is not trying to create a new religion', and prefers to call it 'spiritual and philosophical research'. However you define religion, it appears that the Damanhur 'non-religious' belief system is a conglomerate of a number of ancient religious beliefs, mixed with a large portion of New Age beliefs. This belief system plays a large and important role in everyday life in Damanhur, which is also reflected in the huge effort that has gone in to creating the temples.

However, to create a successful social environment for a group of people with a shared belief system is in no way unique to Damanhur. It has been done even for whole nations, in particular in places such as the Scandinavian countries, in the fifties and sixties - a period with strong political stability, strong economic growth and a very solid social and cultural environment. During this period the citizens still shared the same belief systems, nation states were still quite independent and shielded from what happened in other parts of the world, people knew all their neighbours, looked, talked and thought in a similar way to them, there were no real challenges to the system either from inside or outside each country, the migration of people from different cultures had not yet started, etc. In other words a situation, similar to the one described in Damanhur.

For social experiments on a national level the globalisation process has posed real challenges and none of these experiments really managed to maintain all the benefits that were created during the fifties and sixties. And, if you read between the lines in this book, the world outside of Damanhur seems to be posing a similar threat to their commune. There are several accounts of how people outside of Damanhur have been (unduly and/or unfairly) critical of their community and have deliberately tried to damage Damanhur. In the case of



the Catholic church, because Damanhur posed a threat, and in the case of media reports because Damanhur has been regarded as a (dangerous) cult.

To react this way is quite understandable, in particular if you live in a healthy and vibrant society that does not fit any of the negative images presented by the media. Still, the real challenge to all communes/nations around the world is to live in harmony with all people, even those who do not share the same beliefs or values. A large part of this challenge is to find ways to move away from an us/them attitude, that we all like to adopt (in particular when we are really convinced that we are right and they have got it all wrong). One contributing factor is usually (and paradoxically) to be less positive about ones own ideas and more open to the fact that other solutions may work equally well.

Throughout this book there are indications (although they have to be referred to the author and not Damanhur of course) that the world outside Damanhur has got it wrong. In some cases this is simply because the facts have not been presented properly. For instance the author argues that having multiple personalities is regarded as a disorder by conventional psychology whereas it is seen as something positive in Damanhur (which is not quite accurate). In another example the author argues that common money like the dollar and euro 'have been created by hierarchical political systems and are based on scarcity'. Although this may hold some element of truth, a more accurate presentation would be to say that money has been created the same way in the rest of the world as in Damanhur i.e. as a way to facilitate trade. The fact that it also has been used in less positive way is another story that also needs to be told in order to present a balanced picture.

It is interesting to see that Damanhur has included the essential parts of all ancient civilisations. Like the ancient civilisations, Damanhur has focused on building a shared belief system, based on the words of a strong leader rather than on science and modern knowledge (which usually works very well provided nobody questions the leader).

But, just because Damanhur has quite successfully set out to reinvent the wheel all over again and created its own version of a nation state, does not mean that it has done so in

isolation, and with a better long-term result than elsewhere. The real proof for Damanhur, however, lies in how well it manages to grow to a size where the tribal mentality no longer has an influence, i.e. as is the situation in most nation states, which they seem to criticize.

Having said this, the fact remains that it is extremely important to study and learn from successful groups; in particular those that manage to live in harmony with nature and in a sustainable way. So hopefully Damanhur will continue to serve as an example for all of us to learn from.

(For an outsider's view on Damanhur see also: *Utopian Dreams, In search of a good life* by Tobias Jones. For more information go to www.damanhur.info)

A Pilgrimage in Search of Utopia

Gunnel Minett

UTOPIAN DREAMS, In search of a good life

Tobias Jones

Faber and Faber, 2007, 220 PP,
£12.99, P/B - ISBN 978-0-571-
22380-0

In what he describes as a rather unscientific and random way, Tobias Jones has set out in search of communes where people live a better life than most of us in mainstream Western societies. He tried to find alternative communes that live 'on the fringes of our society.'

What he found were five modern, self-contained communities in England and Italy. The first one was based on New Age ideas. Its worldview was founded on a re-interpretation of ancient Egyptian beliefs. He also visited a catholic orphanage in Italy, a retirement home in York, a detox community in Sicily (which had been given land previously owned by the mafia) and finally a traditional farm which was open to people who had been living rough.

Jones spent time in each place, with an open mind, focusing on finding out what they had to offer by becoming part of them for a short period of time. He found that people in these communes had developed alternative ways to live, based on a much simpler life than most of us in the West experience today. But despite the often idyllic and ideal environment none of the groups were without conflicts.

After visiting the five communes, he decided to stop searching for the right place and to try to make the best of the

place where he lives. He also noted that in order for communes to work properly, they need either a strong focus or a strong leader. Without at least one of these qualities, it becomes difficult to hold the group together. This was illustrated in the retirement home: because of its financial structure, it was very difficult for people to leave. This meant stability for the community in some aspects but, at the same time, diminished the sense of sharing and communal living.

Jones argues that the root of many of our modern problems is Post-modernism. This fuels consumerism, which, with its promise of happiness, has created an epidemic of depression. As a result we are constantly changing and unwilling to commit to anything anymore since this would limit our choices.

Although his analysis of (Post)modern life is very spot-on, Jones does not really address the fact that technology has very rapidly shrunk our planet and thrown us all into cultural free-fall. Only fifty years ago most countries had a rather homogenous population, which meant that people shared values with their neighbours in a much greater scale than we do today. With the extensive migration between countries that has taken place since then, we all have had to adjust to living side by side with people from very different cultures.

Not that there's anything wrong with this, but given Jones's observation of the need for strong focus or strong leadership in order to keep even the smallest communes together, it is no surprise that the level of alienation has increased. Unfortunately this sense of alienation has made us focus on our differences rather than our common features. Scientists, religious and world-leaders alike talk about 'clashes of civilisations' and the inevitable conflicts that this leads to.

But, as Jones points out, simplicity is a strong positive factor for making a community work. One way of expressing such simplicity would be to change our focus from the many differences that separate us to the features we have in common; such as our need to care for our parents and children; our need to have both a sense of basic safety and personal freedom in our lives; our need to be allowed to be different and express our individuality as well as our need to belong to an extended family or group.

The book is written as a travel guide at the same time as it is very thought provoking.



books in brief

David Lorimer

SCIENCE/PHILOSOPHY OF SCIENCE

Grand Unification of a 2 Photon Universe

by H.S. Akrongold

Quantum Science Books LLC 2007, 238 pp., \$24.95, h/b.

Issy Benjamin writes: Akrongold's development of the process of creation unfolds like an adventure story. Nowhere before have I come across such a clear and graphic technical exposition. I'm not a specialist in the field, but following Akrongold's clear step-by-step exposition of the creation of the universe unfolding from The Singularity. His unique Two Photon postulate (particle-type and wave-type) cutting away with one masterstroke the ambiguity of the long held belief in the single photon possessing unpredictable wave or particle properties was for me a life changing experience, an adventure as thrilling and as gripping as any first-rate novel.

The Historicity of Nature

by Wolfhart Pannenberg

Templeton Foundation Press 2008, 242 pp., p/b.

Wolfhart Pannenberg is one of the most influential living German theologians. This Pope sense a number of his essays on the relationship between the natural sciences, philosophy and history within an interdisciplinary context. They cover methodology, creation and nature's historicity, religion and anthropology, and meaning and metaphysics. Many key themes are elaborated, underpinned by the thesis that human existence is shaped by historical decisions and cultural turning points, while nature has an irreversible history during the course of which new complex structures are continually brought forth. Of particular interest is an essay on consciousness and spirit drawing on the work of Karl Popper as well as patristic theology and analysing the two tendencies of human beings towards self-centredness on the one hand and a fuller participation in the Spirit on the other.

Dazzle Gradually

by Lynn Margulis and Dorion Sagan

Chelsea Green Publishing Company 2007, 260 pp., \$25, p/b.

A wide-ranging book by the star mother and son team subtitled 'reflections on the nature of nature' and representing the biological scales of bacteria and Gaia. Their view of nature is highly intertwined and complex, moving beyond current mechanistic understandings. Some essays are joint, others by each of them, and one with James Lovelock. Elegant and provocative, driven by passionate curiosity, the authors are in full creative flow as they explore scientific and philosophical questions connected with larger themes. The section on Gaia will perhaps be of most interest to Network readers, but there is also a lively treatment of Eros. Each part has its own introduction, but the essays can stand largely alone.

Naturalism

by Stewart Goetz and Charles Taliaferro

William Eerdmans Publishing Co. 2008, 132 pp., £8.99, p/b.

This closely argued book considers the promise and perils of contemporary naturalism, taking into account the various definitions both strict and broad. Its arguments, in a nutshell, indicate ways in which various forms of naturalism 'lead us to highly limited or problematic philosophies of consciousness, the self, agency and values'. Beginning with the strict variety of naturalism, closely allied with scientism, they expose the difficulties of accounting for our conscious, intelligent, psychological life in terms that are non-conscious, non-mental and non-psychological. They consider arguments advanced by Dennett, Churchland and Crick, moving on to the nature of the person, the question of the soul, values and the alleged incoherence of theism. They state naturalist positions before subjecting these views to incisive criticism and proposing others that

they regard as more convincing. Quite apart from exceptional human experiences, it is questionable whether a convincing account of consciousness, intention and values can be coherently formulated in purely reductive physical terms when subjective mental operations are required in any event. A masterly analysis of the shortcomings of naturalism and indeed of materialism in general.

Proust and the Squid

by Maryanne Wolf

Icon Books Ltd 2008, 310 pp., £8.99, p/b.

This is the story and science of the reading brain by a teacher of child development and cognitive neuroscience, who is also a researcher into language, reading and dyslexia, as well as a parent herself. This gives a rich variety of perspectives. We may not realise how comparatively recent the skill of reading is, and how it has also shaped the brain in specific ways; indeed, different languages use distinctive neural pathways. The reading brain has influenced cognitive development and has helped us think, feel, infer and understand people in a specific way. We are now making a transition from reading into a more digital mode, which will have far-reaching implications yet to be uncovered. The book deals with the history of reading, ways in which our reading capacity develops, and the science of dyslexia. As the author points out, our capacity to make new connections among neural structures and circuits is central to the development of reading. As she expresses it: 'Reading can be learnt only because of the brain's plastic design, and when reading takes place, that individual brain is forever changed, both physiologically and intellectually.' Proust makes an appearance in the book with his own reflections on reading, which in turn enable the reader to begin to understand the process. A fascinating read for anyone interested in gaining a better understanding of reading.

Science in Civil Society

by John Ziman

Imprint Academic 2007, 361 pp., £17.95, p/b.

The late John Ziman, FRS, wrote a number of books on the philosophy and sociology of science, of which this is his last. Science has many faces and contexts, which Ziman explores in this stimulating and engaging book. We are accustomed to looking at the instrumental aspects of science and technology, but he reminds us that there are many non-instrumental functions such as the generation of world pictures, of which Gaia is a good contemporary example. Science plays an important part in producing knowledgeable people or experts in their fields, who then play a wider social role as well as being responsible for the production of codified knowledge. He discusses the implications of the bureaucratisation and industrialisation of academic science over the last 30 years, which has rendered it less independent but more embedded in the normal structures of society. However, science is only one institutional source of knowledge, which the author keeps in its place with his scepticism about scientism. Ultimately, the aim is 'to establish a fruitful and harmonious relationship between the citizens of a pluralistic polity and their science', which means strengthening connections between academic science and civil society. Scientists interested in understanding their broader role will find this book an invaluable source of ideas.

Cosmos

by Ervin Laszlo and Jude Currivan (both SMN)

Hay House Publishers 2008, 239 pp., £9.99, p/b.

This book is a development and convergence from previous work by both authors, who have a common interest in the physical world, language and the inner world, and the necessity of major shift in human consciousness and structures. The first part sums up the current state of physics and cosmology, building up a picture of the world as interconnected harmonic processes embodying fractal order and holographic principles. To this, they add Ervin's Akasha-

Field hypothesis as an information field. The next major theme depicts the world as exquisitely fine tuned to enable consciousness to gain understanding through exploration of many levels of experience. The final part proposes a number of principles and approaches to enable us to overcome our planetary challenges. There are some signs that this is all happening, and the fundamental impulse is one of co-creation. If the authors are right that the world we live in is information-imbued, essentially intelligent and radically interconnected, then we are part of a co-evolving whole, a thought which can encourage us to go beyond our existing limits. A timely and important book.

MEDICINE/HEALTH

How Your Mind Can Heal Your Body

by David R. Hamilton

Hay House Publishers 2008, 291 pp., £9.99, p/b.

With his unusual background in the pharmaceutical industry where he worked as a biochemist, David Hamilton builds a bridge between mind and body in this well-informed book. The first part reviews scientific studies showing that the mind can heal the body in terms of positive thinking, belief, the placebo effect, visualisation and affirmation. The second part tells the stories of people who have successfully used their minds to heal themselves of cancer, heart conditions, pain, viruses and chronic fatigue. Each story is followed by a commentary saying why the technique seem to have worked in this particular case. An appendix gives suggestions for a wide range of conditions. The whole is a balanced blend of science and human experience. All his work is underpinned by a passionate belief in the power of love, which includes gratitude and kindness. A wise doctor is said to told a younger colleague than the best medicine is love, and if it doesn't work, then the dose should be doubled.

PHILOSOPHY/RELIGION

Walking an Ancient Path

by Karen Tate

O Books 2008, 393 pp., £11.99, p/b.

A significant book arguing that the Sacred Feminine has been stripped out of cultures and now needs to be reinstated or rather reborn. Many readers will be familiar with this theme but the scope of this study sheds new light on it. The author uses the four elements (with spirit at the centre) to represent an understanding and embodiment of the goddess through sacred landscape, ritual, transformation and creativity. Two of these signs are feminine and two masculine. This framework provides a context for reflection on the many qualities of the Goddess, especially those relating to nurture, abundance, love, beauty and embracing diversity and tolerance. Many European sacred sites are described, along with rituals, prayers and invocations. The book is a rich resource for people who would like to delve more deeply into the nature of Goddess.

Who Holds the Moral High Ground?

by Colin Beckley & Elspeth Waters

Imprint Academic 2008, 122 pp., £8.95, p/b.

A slightly misleading title question, to which the authors' answer is no one. They ask if there are universal moral principles or whether they are simply the product of a particular society or culture. By means of a pretty comprehensive survey, they review a great many approaches. The word 'spectrum' in connection with religion is somewhat pejorative, but this is a small cavil. The text covers arguments for and against positions held by the ancient Greeks, Kant, David Hume, utilitarianism, relativism, virtue ethics and particularism. The text is succinct and well argued. In the final chapter referring to the 'ethical stew', the authors identify nine criteria to apply in ethics. These include engagement, consideration of others, evaluation of future consequences, critical thinking and no absolute principles. This is an excellent introduction to moral philosophy, and will sharpen the thinking of general readers interested in working out a more systematic philosophy.

Progressive Secular Society

by Tom Rubens

Imprint Academic 2008, 136 pp., £8.95, p/b.

The author defines a progressive secular society as one committed to the widening of scientific knowledge and humane feeling. He sets

out the assumptions of secularism, and navigates skilfully within these, covering a wide range of issues. However, he does not question his basic assumptions - for instance a mechanistic approach - with which many readers will surely disagree. Nevertheless, it is refreshing to find someone writing so broadly and referring to Camus, Sartre, Schopenhauer, Weber and Montesquieu. One of the most interesting essays analyses the parallel thinking of Russell and Santayana as early apologists of what is now called the new atheism.

Seeking Meaning and Making Sense

by John Haldane

Imprint Academic 2008, 148 pp., £8.95, p/b.

John Haldane takes an approach more or less diametrically opposite to that of Tom Rubens reviewed above. He is professor of philosophy at St Andrews and directs the Centre for Ethics, Philosophy and Public Affairs. He is a frequent contributor to 'thought for the day' and these pieces reproduce essays written for a number of journals and newspapers. Lucid and stimulating, they range accessibly - like his Edinburgh predecessor John MacMurray - across philosophy, politics, culture, science, religion and art, with special reference to aspects of Scottish intellectual life. As humans, we are constantly seeking meaning and attempting to make sense of the world, a process in which John Haldane is fully engaged. One essay relates an encounter with Antony Flew, who famously renounced his atheism, much to the dismay of his colleagues. Haldane's final reflections are suitably humble, when he notes that making sense is available business and that seeking meaning in tails presupposing some objective standards as well as admitting human fallibility. Hence, the most modest position is one that 'postulates a destination without assuming that be on the right road towards it, or that having set out we must arrive.' It is hard to disagree.

The Landscape of Humanity

by Anthony O'Hear

Imprint Academic 2008, 242 pp., £17.95, p/b.

The fifteen essays in this volume are divided into art, culture and politics. Anthony O'Hear is Professor of Philosophy and head of the Department of Education at the University of Buckingham as well as director of the Royal Institute of Philosophy. Most pieces have been published in journals and books, but in bringing them together they illustrate both the depth and breadth of the author's thinking, especially in some of the juxtapositions reflected in titles such as art and censorship, democracy and openness, science and religion. His perspective is traditionalist, while also interpreting human experience as pointing to other dimensions of existence. Important themes include beauty, the subjective and human as the heart of culture, and the political philosophy of Karl Popper, with his insistence on the value of the open society. He usefully compares Popper with Hayek and Oakeshott. The essays are informed with a wide erudition, marking the author out as a significant contemporary link in a long chain of Western thought.

Faith in a Hard Ground

by G.E.M. Anscombe

Imprint Academic 2008, 273 pp., £17.95, p/b.

Elizabeth Anscombe was professor of philosophy in Cambridge and a lifelong practising Catholic. Along with Mary Midgley and Iris Murdoch, her contemporaries at Oxford, she has had an important influence on modern philosophy. With an informative introduction by her daughter Mary Geach, the themes are wide ranging - some religious and others with more social implications. She writes on miracles (including an essay on Hume), transubstantiation, sin, contraception and chastity, the early embryo, the moral environment of the child, and Christians and nuclear weapons. The essays are searching and analytically brilliant, even if non-Catholics may find some of the arguments unconvincing.

G.R.S. Mead and the Gnostic Quest

by Clare Goodrick-Clarke and Nicholas Goodrick-Clarke (SMN, eds)

North Atlantic Books 2005, 236 pp., \$15.95, p/b.

G.R.S. Mead is not a well-known figure outside esoteric circles, so this book is very welcome in introducing him more widely. Mead was initially a leading member of the Theosophical Society, from which he parted, and founded the Quest Society. The book is divided into five parts: universal philosophy, Gnosticism, Hermeticism, esoteric Christianity and initiation. The extensive introduction discusses his life and influence as one who recovered many early texts and made

them available to the public. He influenced Carl Jung, W.B. Yeats and Hermann Hesse. The main body of the book consists of an annotated anthology of his most important writings, and those provides the ideal introduction to his ideas and work.

Enlightenment - The Path Through the Jungle

by Dennis Waite

O Books 2008, 186 pp., £11.99, p/b.

A polemical and rigorous work defending traditional approaches to non-dual teaching against modern western shortcuts advocated by neo-Advaita and the Satsang movement. It is not sufficient to understand intellectually that one is not separate from the source or that one can be the peace that one seeks. Denying the reality of the seeker and the path is a useful insight at one level, but does not take one anywhere, and the danger lies in equating what one is with how one feels. The genuine path is a great deal more arduous and lengthy, and is set out with great clarity in this book. All the paragraphs are numbered, rather like a Wittgenstein tract. Enlightenment is defined as always knowing that reality is non-dual despite the seeming duality of the world. It is an unshakeable certainty far beyond belief. The book is a stern corrective to superficial distortions of traditional non-dual teaching.

Our Life Together

by Jean Vanier

Darton, Longman and Todd Ltd. 2007, 565 pp., p/b.

Jean Vanier is best known as the founder of the international movement of l'Arche communities as well as Faith and Light, organisations bringing together people with developmental disabilities and friends who share their lives. His basic contention is that marginalised people can teach us great things and that true spirituality arises from our relationships with the less fortunate. This book is a collection of letters written from 1964 onwards, which chart the development and progress of these movements rooted in love. In 2005 he writes that he is 'happy to use these last years of my life to announce the vision of Jesus: his love of the weak and the poor.' At the end of the book, he describes a meeting with Pope John Paul II in Rome where the Pope said that people with disabilities can help us to discover new world where love is stronger than aggressiveness. Just a few months later, in Lourdes, he addressed the Pope, saying: 'our Pope is poor. He is fragile, but he is the glory of God. God manifests Himself in him.' It was remarkable moment of mutual recognition, after which the Pope gave him a rosary he had been using, which Vanier carries with him every day. There is a transformative and challenging power in these letters.

The View Through the Medicine Wheel

by Leo Rutherford

O Books 2008, 216 pp., £14.99, p/b.

Here Leo Rutherford distils 30 years of study and experience of the Medicine Wheel, explaining the shamanic understanding of how the world works. It is a powerfully liberating message based on a deep understanding of nature and the cycles of life as represented in both space and time. A key element of the spiritual journey is to transcend the Egoic self and enter the circle of the Authentic self through a process of discovery, training and development. The book explains creation myths and the symbolism of fourness, which comes out in the many diagrams in the book, with a circle in the centre. This leads on to the four directions and a detailed discussion of the Warrior's journey. This encourages us to live life to the full and to move into a larger understanding of life and ourselves, not forgetting that external reality is less real than the inner world and that there is no separate self to preserve. This complex and sophisticated tradition can realign us with the life force from which many of us have been separated.

God Without God

by Michael Hampson

O Books 2008, 250 pp., £9.99, p/b.

The thrust of this radical book is that if we remove the God defined by the atheist - the arbitrary, the autocratic, vengeful and wrathful king - we can liberate the Western spiritual tradition into a new and more contemporary form. The author examines the main strands of Christianity in terms of God, ethics, the status of the Bible, creed, prayer, Community and Sacrament, and finally Eros and the seventh sacrament. The vengeful God is replaced with Yahweh Elohim, characterised as 'the ground of all being and the essence of all that is good.' The notion of sin is similarly redefined, and the status of the Bible and the creeds historically explained. Fundamentalist literalism is seen as a terrible idolatry in view of the fact that there is neither a definitive text nor a definitive translation, and that the

book was compiled over decades by committees from a range of sources. The longest chapter is devoted to the self giving love of Eros. The epilogue reflects on the experience of conducting funerals, and asks if there is anything to hope for beyond. The author's view is not entirely clear in his statement that we return to God and to the mystery from which we emerge. The important point, however, is to live the fullness of life; for Hampson, this means defining love as God and recognising the spark of Divinity in everyone and everything. Many who define themselves as spiritual rather than religious will find themselves agreeing with this reformulation that appeals to both heart and mind.

The Holy Science

by Swami Sri Yukteswar

Self-Realization Fellowship 1990, 109 pp., \$12.00, h/b.

Some readers will know that Sri Yukteswar was the teacher of Yogananda, who writes about him extensively in his classic *Autobiography of a Yogi*. This text consists of a number of sutras with commentaries explaining the essence of his teaching with parallel passages from Hindu and Christian Scriptures. Liberation is equated with salvation and ignorance is the supreme obstacle in the way as we identify ourselves with our material bodies and 'fail to find repose in the true Self'. The Self is understood as a fragment of the Universal Holy Spirit with which one can become one; this corresponds to Spiritual Light, which Sri Yukteswar defines as the Real Substance in the universe. The book ends with a vivid portrait. Although short, it focuses on the essence of the spiritual path.

Eco-Theology

by Celia Deane-Drummond

Darton, Longman and Todd Ltd. 2008, 240 pp., £14.95, p/b.

Celia Deane-Drummond has done much to put eco-theology on the map as a professor of both theology and biological sciences. Here she provides a comprehensive resource book on the subject, which has developed alongside the mounting ecological awareness of the last 30 years. The premise of the discipline is that it is possible to combine concern with the environment and an understanding of God. The book begins with ecological trends, moving on to the relationship between economics and environmental justice. Then there are number of chapters on different approaches to eco-theology from a variety of cultural perspectives. The author then turns to the Bible, Christology and theodicy, concluding with eco-feminist theology and eco-eschatology as well as suggestions for eco-praxis. A valuable book for both students and interested general readers.

The Life and Times of Rudolf Steiner

by Emil Bock

Floris Books 2008, 221 pp., £16.99, p/b.

This is the first volume of biographical essays, first published in German in 1961. It covers his life in Vienna, Weimar and Berlin until the turn of the century, evoking the spiritual and social atmosphere of these cities and the people with whom he interacted, many of whom appear in corresponding photographs. There is a striking passage describing his first encounter with the already sick Friedrich Nietzsche and prompting the study of the author's work that led to his 1895 book. The final essay gives an overview of the occult movement in Germany at the end of the 19th century. A fascinating book for those who would like to find out more about Steiner's early background.

Modern Life - As Good As It Gets?

by Richard Docwra

Green Books 2008, 184 pp., £10.95, p/b.

The answer to the rhetorical question in the subtitle is negative. The structure of the book is straightforward, consisting as it does of an analysis of problems, causes and solutions. Problems include the fact that our lives are too rushed, that are natural spaces are under threat, that shopping is hell, that we are dominated by consumerism and that people are not flourishing. Docwra lays the main responsibility for these conditions with our economic system with its neoliberal focus on unfettered markets, financial capital, profits and growth. This analysis is a good deal more complex than these headings suggest. In the third part he asks how we can change our society, putting forward a new form of economics based on sustainable communities. He also advocates updated mental tools focusing on the art of living, acquiring perspective, intellectual independence and abstract thinking skills. The final chapter proposes a programme for changing our own lives based on

addressing the problems outlined in the first part. This is a useful tool for self-reflection and gives the reader a better understanding of our psychosocial condition and how we can contribute to its transformation.

The Charismatic Path

by Dr. Alex Reichel (SMN)

St Francis Community 2008, 328 pp., p/b.

A mathematician by training, Alex Reichel now runs the Academy of the Word, which is a Christian think tank and the teaching arm of St Francis Community. This book is based on their course, which has an evangelical and devotional slant, while also criticising the excesses of fundamentalism. He explains variety of approaches, also discussing hermeneutics and the nature of faith. The last chapter is the most extensive, and is entitled 'life in the body of Christ', an explanation of seven injunctions concerned with the spiritual life. Two appendices cover the structure of a prayer meeting and an exposition of the Jesus Prayer. There is a deep spirituality here, but one which will appeal more directly to Christians.

The Magician's Tale

by Mark Townsend

O Books 2008, 70 pp., £7.99, p/b.

Mark Townsend is the author of 'The Gospel of Falling Down', which I enjoyed reviewing last year. This book recounts 12 encounters with Jesus through the eyes of the magician priest, representing the author himself. The stories are familiar enough from the Bible but they are told in a new way that adds a new and personal perspective, highlighting the vivid impact of the event on people who might have been there.

Awakening Consciousness

by Sir George Trevelyan (late SMN)

Godstow Press 2008, 290 pp., £14, p/b.

These 28 lectures by Sir George Trevelyan given over a period of 25 years recapture the spirit and range of his interests. He had a remarkable grasp of the underlying realities of our time. He was quick to appreciate the significance of the Gaia hypothesis, realised the centrality of the evolution and expansion of consciousness, and was committed to a thoroughgoing holism in all his activities. He internalised and integrated these insights into his own vision, which he articulated with the potent help of inspirational poetry. The lectures are cleverly grouped as they move through key themes of spiritual awakening, death the great adventure, Shakespeare, music, architecture and education. Less familiar are lectures on the deeper symbolism in heraldry and birds in imagination and poetry — there are new nuggets to discover even for those who knew George well. Running throughout is his unquenchable sense of hope, even if he thought that we were due for a period of uncomfortable transition. His message of awakening consciousness rather than religious revival will surely resonate with a new generation of readers.

PSYCHOLOGY/PARAPSYCHOLOGY

The Pursuit of Unhappiness

by Daniel M. Haybron

Oxford University Press 2008, 357 pp., £30.00, h/b.

Subtitled 'the elusive psychology of well-being', this is a brilliant and comprehensive philosophical treatment of happiness in the psychological sense. The four parts address the fundamentals of prudential psychology, the nature of happiness, nature of well-being, and pursuing happiness. The author distinguishes happiness and well-being, and articulates an emotional state theory of happiness, which forms a major part of his self-fulfilment theory of well-being. This emotional state theory is defended against hedonistic and life satisfaction views in the second part. His central thesis is that people 'do not enjoy a high degree of authority or competence in matters of personal welfare', a statement which challenges the assumption of liberal optimism that people can relatively easily discern what is good for them. He writes in more detail about the three faces of happiness in terms of endorsement (the joy-sadness axis), engagement (energetic-listless) and attunement (the tranquillity-anxiety axis) (p. 121). The book calls us to rethink our assumptions about the good life and the good society, raising many of the questions explored by Aldous Huxley in *Brave New World* and *Island*. All this raises interesting and complex questions for politicians and educationalists as they grapple with introducing happiness studies into the curriculum.

You Can Only Achieve What is Possible

by Dawn Mellowship

O Books 2008, 259 pp., £11.99, p/b.

A refreshing book advertised as self-help antidote to self-help culture. Each section is headed up with a truism that has become a new-age cliché about themes such as the equation of material and spiritual success, manifesting anything you like, the new global spiritual consciousness and not taking responsibility for everything. The author begins with a 'tall tale' illustrating the theme from her own experience, for instance as a workshop. There follows a commentary section headed 'Seriously Thought' and some practical exercises and techniques. Her own view is that one should trust one's intuition rather than rely on the judgement and opinion of others, although intuitions can also be wrong. A useful cautionary book on the spiritual path.

The Supernatural Occurrences of John Wesley

by Rev. Daniel R. Jennings

Sean Multimedia 2005, 153 pp., p/b.

An intriguing compilation of experiences derived mainly from Wesley's journals. They are divided into a number of chapters and include experiences of healing, the gift of tongues, prophecy, visions and dreams, and angels. Other chapters are stranger in modern terms, such as experiences of divine retribution against his enemies and his experience of spiritual warfare. However, some of the individual experiences are quite fascinating, for instance of dreams that foretell events, one even involving a wife dreaming that her husband would be drowned in the afternoon. Another relates the case of breast cancer miraculously healed, which ends with following remark: 'Now here are plain facts: 1. She was ill: 2. She is well: 3. She became so in a moment. Which of these can with any modesty be denied?' Yet another case relates how a murder was prevented by premonitory dreams from three separate family members. There are resonances with many more modern cases from the literature.

Brainstorming

by Shaun Gallagher

Imprint Academic 2008, 276 pp., £17.95, p/b.

A journey of views and interviews on the mind closely tracking the concerns of the *Journal of Consciousness Studies*. The author is a philosopher and cognitive scientist who has read widely in the field and met many of the key thinkers. The format of the book is original, in that it combines analysis, interview and commentary; indeed, in some chapters dialogues are created with the likes of Descartes and Merleau-Ponty. Every aspect of the field is covered, starting with a chapter on how to study the mind then moving on to the nature of consciousness, intersubjectivity, empathy, language, cognition, self-consciousness, free will and moral responsibility. As one would expect, the discussion is very well-informed and the reader is exposed to a number of perspectives. This makes it more interesting not only to general and specialist readers, but also potentially to psychology and philosophy students.

Transpersonal Development

by Roberto Assagioli

Inner Way Productions 2007, 297 pp., p/b.

This is the last book published by Roberto Assagioli, 14 years after his death in 1974, and translated into English for the first time. It consists of a number of essays written over a long period, which have been grouped into three main parts: the study of the superconscious, spiritual awakening and spirituality in everyday life. Such was the range of Assagioli's penetrating insight, that this book is full of gems. Many of the essays represent important distillations of lessons learned on the spiritual path. The second and third parts are of greatest practical value in describing such topics as the stages and crises of spiritual awakening, the purification of the soul, and obstacles to spiritual development such as fear, attachment, aggression and criticism. The final part reviews elements of everyday spirituality such as the sublimation of emotional and sexual energies, money, the tension between action and contemplation, and various spiritual elements in our personality such as beauty, love, joy, power and will. A hugely valuable addition to the literature on transpersonal psychology in terms of both theory and practice.

FUTURE STUDIES/ ECONOMICS/ECOLOGY

Climate Change

by **Jon Clift & Amanda Cuthbert**

Green Books 2008, 92 pp., £4.95, p/b.

A small book of simple everyday things you can do to make a difference. It covers heating, lighting, cooking, washing, electronic appliances, rubbish, travel, water and renewable energy. Each section explains the link to climate change and make specific suggestions, ending with a tip if you want to do just one thing. A useful book to keep around as a reminder of one's personal responsibility.

The Final Energy Crisis

by **Sheila Newman**

Pluto Press 2008, 324 pp., p/b.

A gap of only a few months makes an enormous difference to commodity prices in our current situation. On the back of the book, we read that oil has reached \$125 a barrel; we now know that it peaked at \$147 and has slumped to around \$40. This vast fluctuation makes little sense except in terms of extreme speculation on both up and down sides. The starting point of this book is unusual in that the contributors engage with depletion trends not only in oil, gas and coal, but also in uranium, soil and biodiversity. It is pointed out that the per capita peak in production is different from the actual peak, and that the per capita peak has already passed in many cases. Reflecting the work of Richard Heinberg reviewed in previous issues, the authors highlight the relationship between the use of fossil fuels and the growth of population, and anticipate transition to a post-oil era. In the meantime, an energy crunch seems likely, especially if we manage to return to anything resembling business as usual. Naturally, geopolitics is part of the picture, and the whole section is devoted to these topics, with special reference to the situation in the Caspian Sea. A key issue is whether we have the capacity to change our collective behaviour or whether, as in previous civilisations, we will overshoot before we crash. The difference, this time, is that we have plentiful analyses of upcoming challenges and an unprecedented communications system so we can theoretically change direction. However, before that seems possible, we will need a new vision of human fulfilment that does not depend on endless economic growth.

Rekindling Community

by **Alastair McIntosh**

Green Books 2008, 112 pp., £8.00, p/b.

Subtitled 'connecting people, environment and spirituality', this Schumacher Briefing considers the implications of living as if all life is interconnected — which it is. The author supplements his insights with those of a number of associates from the Centre for Human Ecology, whose work is described in a series of boxes. Following the example of Schumacher himself, Alastair adds his diagnosis of our metaphysical disease before considering the way that community reflects the interdependence of the psyche. The satisfaction of fundamental human needs must take these factors into account. He gives a number of case studies of rural regeneration and presents some useful methodological tools, including the relationship between head, heart and hand, the cycle of belonging and the wheel of fundamental human needs. What makes Alastair's work so important, as will be apparent from my full review of his climate change book, is that he brings together the metaphysical and practical, the mystical and the everyday. A short but significant book.

In Tune with the Moon 2009

by **Michel Gros**

Findhorn Press 2008, 112 pp., £8.99, p/b.

An annual calendar similar in concept to its biodynamic equivalent for specific influences of the Moon on both plants and our own bodies. Readers are invited to experiment for themselves to test the Moon's influence on plants by sowing at ostensibly favourable and unfavourable times, and noting the differences. Some surprising details are added, such as favourable and unfavourable days for surgical procedures, and guidance for the keeping and winegrowing. The book is nicely illustrated and can be used in conjunction with Maria Thun's reviewed below.

The Biodynamic Sowing and Planting Calendar 2009

by **Maria & Matthias Thun**

Floris Books 2008, 64 pp., £6.99, p/b.

This annual publication is the practical guide for who want to farm and garden biodynamically. There are useful notes for new readers and a number of special features, including this time the care of bees with monthly notes for beekeepers, how to work with biodynamic preparations, a recipe for rye bread and answers to questions from readers concerning potato and tomato culture. The book is illustrated with a number of small photos as well as charts and is based on nearly 50 years of search and practice.

The Earth After Us

by **Jan Zalasiewicz**

Oxford University Press 2008, 251 pp., £14.99, h/b.

This book asks what legacy humans will leave in the rocks, projecting forward 100 million years to a scenario where alien explorers land on Earth. This is real geological time, which is a big stretch for the human imagination when we are used to seeing ruins of previous civilisations only a few hundred years old. This perspective puts the human enterprise in proportion, asking what traces will be left of our great cities and works of art. The author tells us how the rocks reveal their story and imaginatively reconstructs what future explorers might think of us and the impact we have made on our environment. It is a reflection that may encourage us to limit our footprint, lest we be seen by these explorers as 'amazingly clever and utterly foolish two-legged apes.'

Prophets of Nature

by **Gordon Strachan (SMN)**

Floris Books 2008, 156 pp., £14.99, p/b.

Subtitled 'green spirituality in romantic poetry and painting', this book is about the 'essentially mystical experience the spirit of nature as well as the spirits in nature and of the Creator Spirit', based on the traditional idea that nature was the second Bible. Gordon enters a cautionary note about the relationship of St Francis with nature in that he is seen preaching to the birds rather than learning from them. Hence he prefers William Wordsworth as his patron as one who developed what we would now call ecological awareness. He takes as its point of departure the vision of Ezekiel, moving on to the influence of water on Rousseau, Wordsworth and Wagner. He then devotes a chapter to Coleridge's *Ancient Mariner* before turning to the paintings of Blake, Samuel Palmer, Caspar David Friedrich, Turner and Pre-Raphaelites. In discussing Gerard Manley Hopkins, Gordon feels that the Victorians suffered from an increasing inability to perceive that 'the world is charged with the grandeur of God'; hence, in his view, a principal reason for falling off of faith in that era. Many of these figures felt that the increase in material prosperity with technological development was leading to a loss of spiritual roots and ethical integrity. The lesson for today is that without a redevelopment of our sympathetic imagination we are unlikely to be able to turn around our exploitative attitude to nature.

Q. Will the Human Species Survive? A. No!

by **David P. Anderson**

David P Anderson 2008, 471 pp., h/b.

The title says it all, although one could not necessarily infer the exact content, since the thesis is concerned with our images of God and their consequences - principally those of the three monotheistic religions. The God of Love is also a God of Anger, in contrast to the picture emerging from the Gospel of Thomas and the Dead Sea Scrolls. The author does not pull his punches in his analysis of exclusivism in general and extreme Islam in particular, although the same patterns are present in Christianity and Judaism. The crucial problem is the image of the ancient punishing God pattern of behaviour which is among primary causes of present world conflict. Opponents are evil by definition, people are either for or against us in these apocalyptic times. This dichotomising is certainly a significant source of conflict. The book is well informed, even if it could have done with some editing at nearly 500 pages long. The author's approach is based on a series of a thousand questions relating to the Western image of God. He is very strong on the rigidity of these archaic belief systems, but less so in placing them in some kind of evolutionary picture, whereby many people have already moved beyond these forms. See also my review of Michael Hampson's book for a different slant on a similar issue.

EDUCATION

Holistic Education

by Anne Phillips

Green Books 2008, 141 pp., £9.95, p/b.

Subtitled 'Learning from Schumacher College', this book by its first Director charts its development and progress since the early 1990s. Set within the wider context of Dartington Trust, the college has emerged as a leading educational initiative, with its strap line of 'transformative learning for sustainable living.' Many leading green thinkers have taught there and appreciated its strong sense of community. Satish Kumar has been an inspirational force from the beginning, and contributes the preface. The great value of the book lies in its distillation of experiences likely to occur in similar contexts. Hence, anyone thinking of setting up a parallel initiative should draw on the insights and lessons gleaned. It is a book that will interest anyone concerned with a more holistic and creative approach to education that turns ideas into action.

The Great Books

by Anthony O'Hear

Icon Books Ltd 2007, 465 pp., £10.99, p/b.

Philosopher Anthony O'Hear has produced a masterly introductory overview of some classics of Western literature, starting with Homer and going up to Goethe's Faust. It is a book about the great books, but also includes the way in which earlier works influenced later ones and are referred to by them. O'Hear guides the reader through the narratives, quoting occasional extracts and commenting on the progression of the story. The Greeks and Romans have five chapters, with Homer, the great tragedians, Plato on the death of Socrates, Virgil and Ovid. Moving on rapidly in time we come to St Augustine's confessions and then a few more centuries on to Dante and Chaucer. The book continues with Shakespeare, Cervantes, Milton, Pascal, Racine and Goethe. The selection is to some extent personal but the coverage of extensive. This makes it of interest to the general reader, but also to the student looking for a wider context.

Children's Games in Street and Playground - Volumes 1 and 2

by Iona and Peter Opie

Floris Books 1969, 221 pp., £9.99, p/b.

Reprint with a new introduction by the editor of the natural parenting magazine. This quite fascinating research was carried out in the 1960s into games that children play by themselves between the ages of six and 12, out of sight of adults and with no props like bats, balls and skipping ropes. It shows that adults have no real need to structure the play environment of children and that, by implication, play parks may in fact constrain the variety of games played. The first volume details games involving chasing, catching and seeking, while the second elaborates on eight further themes including daring, guessing, acting and pretending. The authors found variants of games and their names across the country, for instance tig in the north becomes touch in the south-west and he in the south-east. In addition, many of the accompanying formulas and rhymes used by children are given, with regional variations. The authors comment on which games were in decline and which are on the increase. I don't know what kind of research is going on in this field currently, but it would be fascinating to know some more up-to-date results. Of course, many new kinds of game have been developed in the intervening period, especially those involving new technology, many of which are less social and involve little or no exercise and fresh air. I hope that publication of this book will revive the debate about the kinds of games our children play.

GENERAL

Nelson Mandela - A Very Short Introduction

by Elleke Boehmer

Oxford University Press Inc 2008, 204 pp., £7.99, p/b.

We are all influenced by the power of the Nelson Mandela icon. This short biographical essay considers the multifaceted nature of Mandela's achievements in the contexts in which they came about. The strength of the book is that it considers the processes of meaning-making which have caused his achievements to be admired. This involves questions of character and style (he was always an elegant dresser and a consummate public performer) as

well as the many experiences and people that shaped his life. Comparisons with Gandhi and Nehru provide historical antecedents, but his approach was also pragmatic in recognising the limitations of nonviolence in his situation. The final chapter on his ethical legacy observes how he came to understand conversation and dialogue as essential means in bringing about change.

The Love That Does Justice

by Michael A. Edwards & Stephen G. Post

Unlimited Love Press 2008, 235 pp., \$9.95, p/b.

Subtitled 'spiritual activism in dialogue with social science', this book is the outcome of a conference in 2004. It falls into two parts, with 20 contributions from spiritual activists, and a similar number of perspectives from researchers. The work of each contributor is described along with insights derived from their respective experiences. The title bringing together at love and justice is the key to the book, making as it does an explicit connection between inner transformation and outer action whereby we must be the change we want to see in the world.

2012 and the Galactic Centre

by Christine R. Page (SMN)

Bear & Company Publishing 2008, 233 pp., \$16, p/b.

Christine Page, trained as a doctor and homoeopath, is also an astrologer, intuitive and seminar leader on energy medicine. This book focuses on the time of transformation through which we are currently living, between 1987 and 2023, which she sees as a window of opportunity for the creation of a new era of expanded consciousness. The pivotal point, according to a number of traditions, is the year 2012, when the sun will be aligned to the Galactic Centre for the first time in 26,000 years. Christine sees this alignment as one of the manifestations of the great mother, heralding a rebirth of the Divine feminine in terms of intuitive capacity and emotional creativity. The book begins with a passage of revelation, a message that we must transcend our limited identities based on fear and separation. She discusses the rhythms of the Moon and the nature of the hero's journey before embarking on a detailed exploration of transformative path based on passing through the signs of the zodiac in an alchemical process leading to the wisdom of the heart and a sense of our true identity and connection to the source.

Batu-Angas

by Anne Cluysenar

Poetry Wales Ltd 2008, 78 pp., £8.99, p/b.

This is a series of poems based on Alfred Russel Wallace's vision of nature, with an introduction by Charles Smith. The poems are all preceded by a quotation from Wallace and many are illustrated by the object of the poem, for instance a butterfly. Some conjure up visits to the Natural History Museum or encounters with fellow Wallace enthusiasts. Anne seeks to enter into the mind of Wallace the collector, the thinker, the artist - many of his drawings are exquisite. One striking poem he evokes the capture of a completely new form of the bird of paradise by Wallace's assistant. The flutter of the bird is likened to a metallic quiver as the poet reflects on the centuries before the bird was discovered by science. The 19th-century context where Wallace shot a few orangutans is compared with the 20th century wholesale destruction of their habitat by logging companies. The trials of Wallace's travels are vividly depicted — insect bites, long periods of illness or inactivity and lack of civilised company. Civilisation, however, is a double-edged sword since the natives are unperturbed by what she calls the longing after gold. A charming and perceptive series of poems.

Short and to the Point

by Jolyon Connell

Dennis Publishing Ltd 2007, 142 pp., £9.95, h/b.

The Week readers will also have enjoyed Jolyon Connell's terse and entertaining editor's letters, of which this is a selection of over 100. The fascinating introduction explains with self-deprecation and humour the genesis of the magazine and the perils of a new start-up in the highly competitive magazine market. I was not surprised to read that word-of-mouth is the best marketing tool as this has been true of me and my friends who recommend it to others as a way of keeping information overload at bay; indeed, the existence of *The Week* is one reason why I no longer take a daily newspaper. The pieces tend to begin with a pithy observation which is illustrated and clearly elaborated, leading to logical and often wry conclusions. One of my favourites, a reflection on short-term memory, involved Jon trying to get his neighbour to turn off an opera recording which was

keeping him awake, and which he discovered in the morning was coming from his own car. Immensely entertaining and stimulating.

The World's Best Books

by Jolyon Connell (ed)

Dennis Publishing Ltd 2006, 177 pp., £9.99, h/b.

Readers of *The Week* will be familiar with the regular feature of six best books chosen by well-known people. This book collects over 150 selections, some of which are more specific than favourite books such as favourite thrillers or books to be re-read on the beach on return from hospital. The contributors write couple of sentences about the book, which may prompt readers to purchase it. Of course, the total selection is interesting in the same way as the Desert Island discs. At the back are two interesting tables, one with the top authors and the other with the top books. Interestingly, the top author selected is Evelyn Waugh, followed by PG Wodehouse and Charles Dickens; then Jane Austen, Anthony Trollope and William Shakespeare. Correspondingly, *Scoop* is the top book, which perhaps reflects a choice by journalists. Not far behind are such classics as *Anna Karenina*, *War and Peace*, *Proust*, *Jane Eyre*, *Gibbon* and the life of *Doctor Johnson*.

Pandora's Panacea

by Carole Sawo

Hebe Publishing Company 2007, 121 pp., £9.99, p/b.

An unusual book that begins with a reflection on an incident when a blackbird tumbled down the author's chimney into her living room. She puts herself in the bird's position of falling headlong into what seems to be a disaster; there is nevertheless an interesting reciprocity and parallel between bird and human as we too fall down in the course of our lives, and get up again. This is what she calls the work of transformation, of seeing an opportunity in every event, however challenging. The introduction is a commentary on a number of holographic works of art, including *The Scream* and two of Michelangelo's sculptures. She then explains the structure of the volume as the poetry moves through the different phases of life, which psychologists and those who have seen more deeply into their experiences will recognise. There is an interesting parallel here with the initiate restructure of Alastair McIntosh's poetry reviewed below. The tone of the poems is very variable so it would not be possible to pick one out as typical. However, one of my favourites was *In Honour of the Death of the Ego*, which begins with a picture of isolation, sorrow, anger and disappointment and metamorphoses into a feeling of peace and rebirth, expressing surprise that 'that I would live past my dying/ that I could be truly free.' A later poem is entitled *The Comedy of Life*, At the end of which 'when feelings stopped but eyes perceived/ I found in front of me/ no tragic consequence of fate/ but Divine'st comedy.' We open Pandora's box of life, according to the author, not out of curiosity, but rather in faith, fortitude, wisdom and love, the very qualities we need in our work of transformation. This book is an inspiration along the path.

Love and Revolution

by Alastair McIntosh

Lucis Publishing Company 2008, 92 pp.

It is unusual to review three books by the same author in one issue, but this one is rather different as a volume of poetry. The three parts reflect the hero's journey of departure, initiation and return. The title invites the reader to consider that spiritual politics entails an erotic union of love and revolution. There is a Scottish texture and context to the volume, reflecting the land campaign on Eigg as well as a sense of belonging rooted in Alastair's upbringing on the Western Isles - some poems have explanatory notes at the back, and there is also a glossary. He suggests a new beatitude: blessed are the passionate, they shall be lovmakers in eternity. *Blessing*, from the third part, gives a flavour of the whole: In the Februaries of your life/ may you find warmth/ by blazing hearths/ of honest kindness/ congregated choirs /of sparkling logs/ that kindle one another/ to community And may the sap/ of all you yearn/ be limpid pressed/ with peaty nose/ and flowing poured/ to raise a glass/ that sparkles in rainbows/ round your eyes The volume reflects a passionate commitment to life, love and justice,

The Power of Stories

by Horst Kornberger

Floris Books 2006, 256 pp., £9.99.

Traditionally, we have all been brought up with stories and fairytales, but television and the Internet are increasingly taking up the psychological space of children. This book is about nurturing children's imagination and consciousness by means of stories, The

author calls this 'story medicine' whereby ancient traditions used stories as a means of transformation and healing. So he defines the role of the story to regulate the household of our soul, to transform, heal and educate the psyche, and via the psyche the world. We are shaped internally by stories — consider the impact in the UK of the non-stop stream of stories about the recession or the death of baby P. What counter-nourishment are we offered for the soul? Only the stories we choose to read ourselves. The book allows stories to reveal their messages, drawing on many well-known tales such as the *Odyssey*, *Parzival*, *Oedipus*, the prodigal son and the Arabian nights, leading to a phase of creative, active story making. The second part uses sample stories matched to age groups to illustrate their potential effects. These include the three Billy goats gruff for four-year-olds, *Hansel and Gretel* for 6 to 7-year-olds and Norse myths for 10-year-olds. This leads on to a consideration of *Harry Potter*, *Narnia*, *Winnie the Pooh* and the *Lord of the Rings*. The popularity of these books shows that there is still a hunger for role models of the hero's journey. The third part applies these insights to the making of stories in which parents can participate. This is a very important study of the role of stories in shaping our culture, reminding the reader of their central role.

Don't Get Fooled Again

by Richard Wilson

Icon Books Ltd 2008, 279 pp., £12.99, h/b.

Subtitled 'the sceptics guide to life', much of the content and tone of this book is predictable, but it is a corrective to many human foibles and inconsistencies. The author asks why people get fooled by ideas that turn out to be nonsense. He rightly warns against wishful thinking, over-idealisation, demonising enemies, moral exclusion and groupthink, and excoriates fundamentalism, relativism and pseudo-scholarship. One of the places where I parted company with him was in his treatment of the 9/11 Truth Movement, which is only partially informed. He has clearly not read any of the serious analysis of David Ray Griffin, who refutes every point he makes. We need a more sophisticated approach to conspiracy theories than found here.

DEATH AND DYING

Gentle Dying

by Felicity Warner

Hay House Publishers 2008, 209 pp., £8.99, p/b.

Subtitled 'The simple guide to achieving a peaceful death', this book lives up to this description. The author is founder of the Hospice of the Heart Trust and her methods are used by many health professionals. This book outlines these in a clear and readable fashion, inviting readers to reflect on the manner of their own deaths and the circumstances in which they would like to pass over. It is full of wisdom and compassion, describing patterns of events around dying and relating experiences by way of illustration. The work of so-called Soul Midwives is explained in terms of a toolkit. This volume should be in every hospice and on the reading list for nurses and other medical professionals. See related websites: www.gentledying.com, www.hospiceoftheheart.org, www.soulmidwives.co.uk

Meditations on Living, Dying and Loss

by Graham Coleman (ed)

Penguin/Viking Books 2005, 144 pp., £8.99, p/b.

A remarkable book drawn from the first complete translation of *The Tibetan Book of the Dead* by the editor. Many readers will be familiar with this text, but here it is presented in an accessible form, divided into three sections of living, dying and loss. The introductory commentary by the Dalai Lama is worth the cost of the book alone. He explains that the Tibetan teaching on the nature of consciousness, memory and death, distinguishing between gross and subtle manifestations. He comments that if material things are composed of cells, atoms and particles, then consciousness is composed of moments. Each extract is then preceded by an introduction, which puts the text in a modern context. Compulsory reading for a greater insight into life and death.



Guidelines for authors submitting articles to the Network Review and to the Members' Articles section of the SMN Website

Members are invited to submit articles for inclusion in the Network Review, which is published and distributed to members of the Network three times a year. Articles may be a presentation and discussion of members' own research or ideas, or a review and discussion of research or ideas by others. Supporting references should be included wherever possible.

All contributions are scrutinised by the Review's Editorial Board, and by external experts where necessary, and suggestions may be made about changes and improvements.

Since we receive more articles than we can publish, some may be included in the Members' Articles section in the Members'

Circle of the SMN website. Members may also submit articles simply for inclusion in this section.

Format

- Times New Roman
- 12 point font
- Single Spacing
- Abstract of under 200 words
- Word limit: Network Review submissions - 3,000 words
- Word limit: Website only submissions - 6,000 words
- Where possible break the text with a few sub-headings
- Brief end-notes where appropriate, using standard bibliographical referencing
- A brief bio to append to the article

Submission details

- By e-mail attachment to the Editor, David Lorimer, dl@scimednet.org
- By post on CD as a Word or PDF file in Apple or PC format - send to David Lorimer at Gibliston Mill, Colinsburgh, Leven, Fife KY9 1JS. Disks should be labeled with the file name and author's name. If you are sending a disk please send four paper copies as well



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The Scientific and Medical Network is a leading international forum for people engaged in creating a new worldview for the 21st century. The Network brings together scientists, doctors, psychologists, engineers, philosophers, complementary practitioners and other professionals, and has Members in more than thirty countries. The Network is a charity which was founded in 1973 and became a company limited by guarantee at the beginning of 2004.

The Network aims to:

- challenge the adequacy of scientific materialism as an exclusive basis for knowledge and values.
- provide a safe forum for the critical and open minded discussion of ideas that go beyond reductionist science.
- integrate intuitive insights with rational analysis.
- encourage a respect for Earth and Community which emphasises a spiritual and holistic approach.

In asking searching questions about the nature of life and the role of the human being, the Network is:

- Open to new observations and insights;
- Rigorous in evaluating evidence and ideas;
- Responsible in maintaining the highest scientific and ethical standards;
- Sensitive to a plurality of viewpoints

Network Services

- Network Review, published three times a year
- Monthly e-newsletter for members with email
- Promotion of contacts between leading thinkers in our fields of interest
- A blog discussing current and controversial topics and science, medicine and spirituality (<http://scimednet.blogspot.com>)
- A website with a special area for Members
- Regional groups which organise local meetings
- Downloadable MP3s from our conferences

Network Conferences

The Network's annual programme of events includes:

- Three annual residential conferences (The Annual Gathering, Mystics and Scientists and Beyond the Brain alternating with The Body and Beyond)
- Annual residential conference in a Continental European country
- An open day of dialogues on a topical subject
- Evening lectures and specialist seminars
- Special Interest Group meetings on themes related to science, consciousness and spiritual traditions

Joining the Network

Membership of the Network is open to university-qualified scientists, doctors and other professionals. Student members must be studying towards a first degree engaged in full-time study.

Subscription Rates

Membership of the Networks costs £40. Please contact the office for further details.

Student Membership for First degree students: £15

Membership Applications

To request a membership application form, please contact:

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The Scientific and Medical Network,
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